

RANDALL & Co.

MANUFACTURERS OF

MODERN & IMPROVED

HARNESS
AND HORSE
COLLAR
MACHINERY

Cincinnati, O. U.S.A.

ILLUSTRATED CATALOGUE OF

Improved Harness

and Horse-Collar

1902

1902

MACHINERY



MANUFACTURED AND SOLD BY

RANDALL & CO.

802 West Sixth Street,

CINCINNATI, OHIO.

❧❧ To the Harness and Horse Collar Trade: ❧❧



We invite your attention to our **Catalogue for 1902**, the MOST COMPLETE AND FULLY ILLUSTRATED CATALOGUE of machinery for your use ever published.

Our business is over forty years old. We have worked long and hard in designing, building and introducing new leather working machinery, and are pleased with our success. With ample facilities we shall endeavor to maintain a reputation for first-class work and moderate prices.

We carry a large stock and can fill orders, generally, with great promptness.

We thank you for your patronage in the past, and hope to deserve your orders in the future.

Respectfully yours,

RANDALL & CO.

• • A Word About Creasing Machines. • •

WE are the oldest manufacturers of Creasing Machines in the country. Such machines have been made since 1858 by the present firm or their predecessors, and we believe that we can confidently claim that we today, with years of experience, can produce these machines of a higher quality and better suited to the wants of the Harness trade than any other maker of machines in this country.

The most apparent departure in our Creasing Machines of the present day is the adoption of the **4-cog gear in place of the 2-cog gear**. With this gear the thickest trace can be creased or finished without throwing teeth out of gear, as is the case in all machines having but two cogs. We have added this improvement to our present make of regular machines without extra cost. All gears are machine cut.

Creasing Machines Nos. 1, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, 10, $10\frac{1}{2}$ and 11 are the best that we can produce.

The frame proper is cast in one piece, dispensing with the wood bottom for so many years used on all Creasing Machines. This makes a very stiff, rigid machine.

The journal boxes are made adjustable, and can easily be renewed when worn out. This makes the frame of the machine as durable as it is possible to make them.

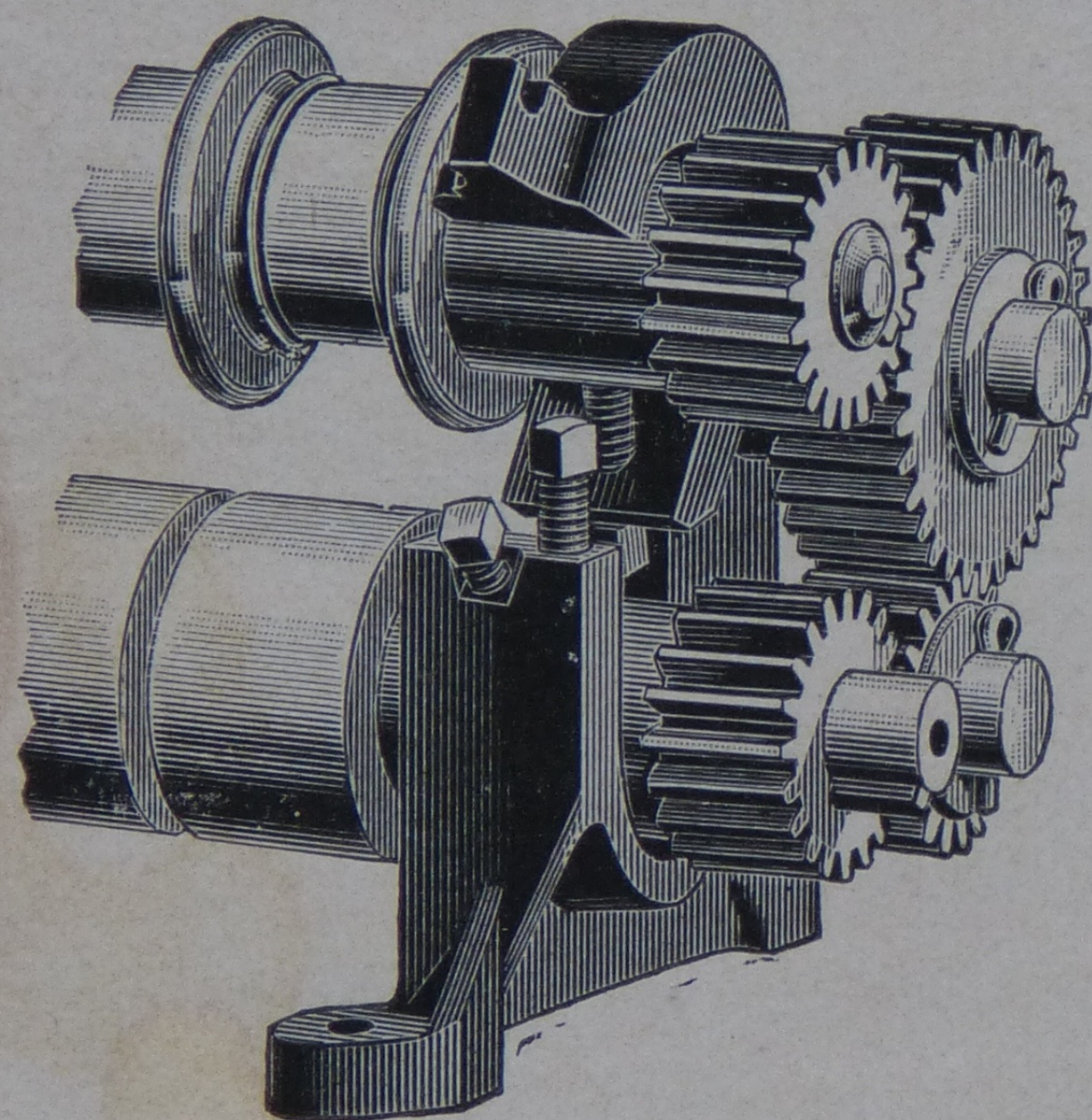
The application of the pressure by the spring, and the releasing of the pressure by the treadle, is as quick in its action and as simple as can be made.

The rolls are made with heavy flanges (or dividers), separating the widths. The Creases are shaped with accuracy and care, and the outline of the Crease is the same as in hand tools; thus a strap can be creased by machine and resemble hand-creased work.

The Creasing Machines described above are the best by far yet offered the Harness trade, and our endeavor is, in producing any tools shown in this catalogue, to make them in the best manner possible, and in design and style the best adapted to perform the work required.

See page 14 for description of our Power Creasing Machines.

PATENT FOUR-COG GEAR.



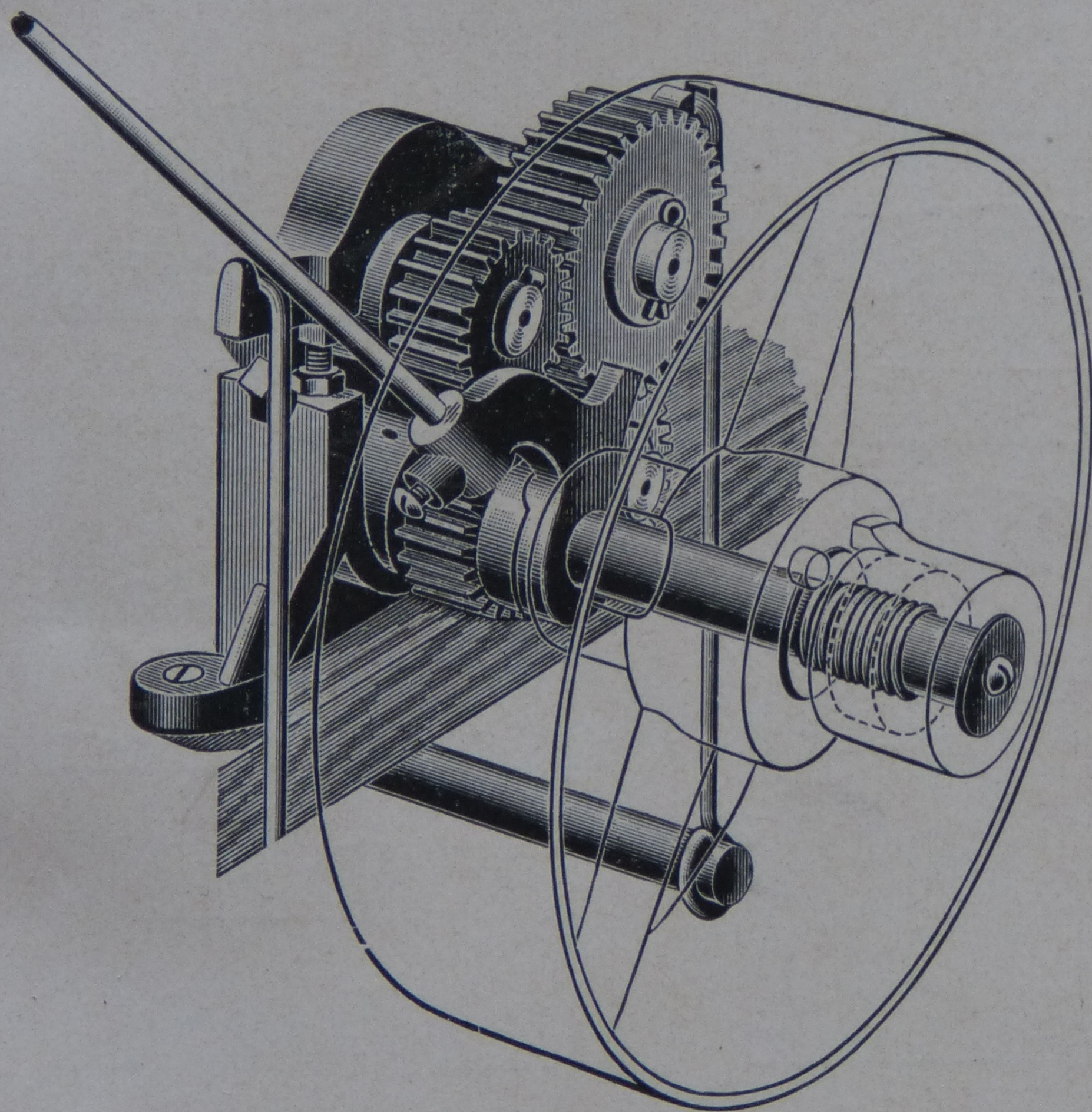
THIS cut shows the greatest improvement that has been made in Creasing Machines in recent years.

All Creasing Machines having two-cog gear are almost worthless for creasing **thick** Straps, and can not be used at all for finishing Traces. With our improved Frame for holding the Rolls we have been enabled to attach the four-cog Gear to our Creasing Machines, which makes them the best machines by far yet made. The Gears are *cut* from solid blanks, and the Machine is almost noiseless in operation.

The cut shows the Rolls of the Machine as thrown apart so that they are entirely separate from each other, and yet the Cogs are in gear so that both the upper and lower Rolls can be revolved. By this cut it is readily seen that a Trace, when run through a Creasing Machine, will not throw the Cogs out of gear.




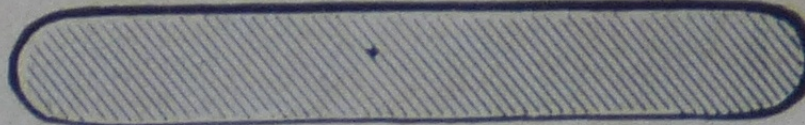
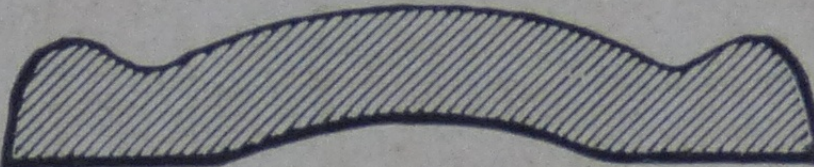

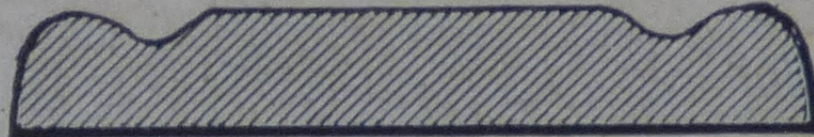
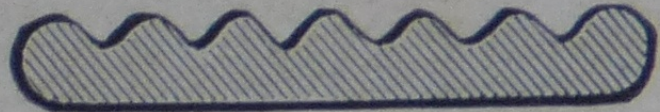
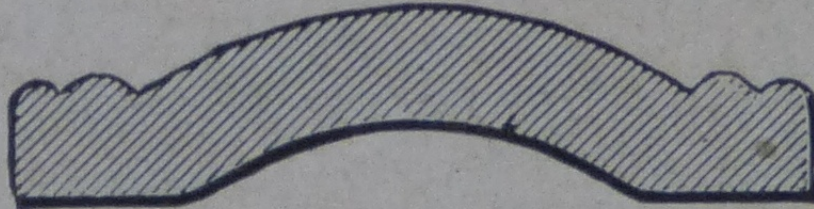



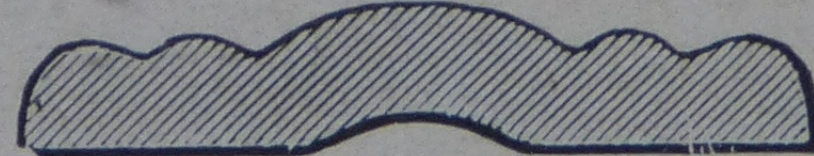

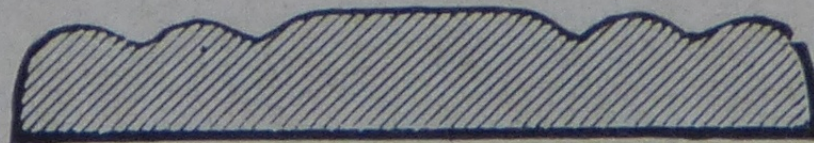
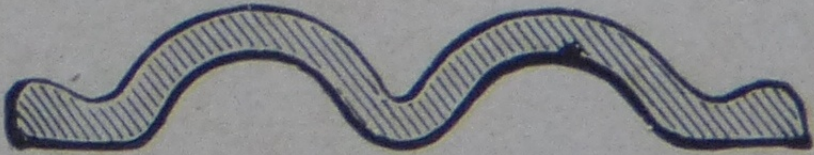
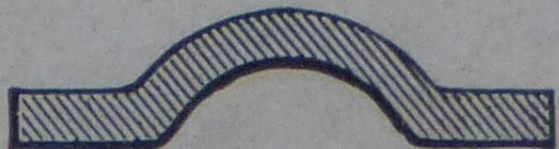
We are now making all long Roll Creasing Machines with this gear. Parties buying Creasing Machines should buy no machine without it.

Patent Clutch Pulley and Shifting Attachment.



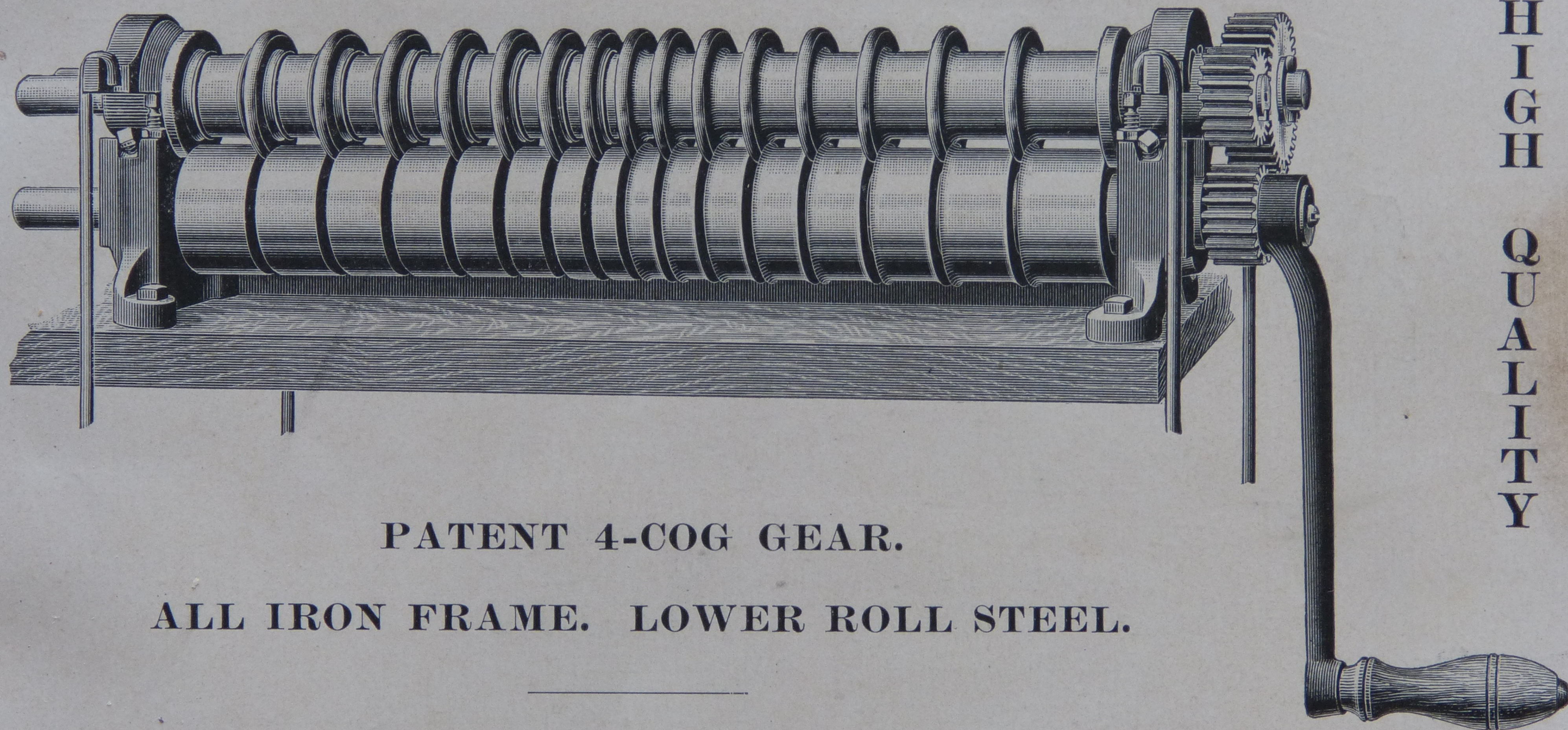
THIS cut shows our device for driving Creasing Machines by power. In place of the tight and loose pulley formerly used, we now make a Clutch Pulley and Shifting Attachment. With this pulley and attachment the machine can be **instantly** started and stopped by throwing the lever backward or forward. When the machine is not in use the pulley is revolving on the shaft, and the power can be taken from the pulley at once by the clutch lever attachment. It is extremely practical and very simple, shifts quickly and easily, makes the machine very complete and is the best device yet made for driving Creasing Machines.

STYLES OF CREASE.

No.		No.		No.	
0.	Narrow single, flat.	0		9	
1.	Narrow single, flat, medium.	1		10	
2.	Wide round edge single, raised.	2		11	
3.	Wide round edge single, flat.	3		12	
4.	Regular double, raised.	4		13	
5.	Regular double, flat.	5		14	
6.	Four-row round edge, raised.	6		15	
7.	Four-row round edge, flat.	7		16	
8.	Oval lines.	8			
9.	New antichafing trace rolls.				
10.	Round edge finishing rolls.				
11.	Corduroy center creases, flat.				
12.	Corduroy crease, edge to edge, flat.				
13.	New style four-row, raised.				
14.	New style four-row, flat.				
15.	Heavy center crease for narrow straps.				
16.	Double raised layer.				

Any style to order.

NO. 1 PATENT CREASING MACHINE.



H
I
G
H

Q
U
A
L
I
T
Y

PATENT 4-COG GEAR.

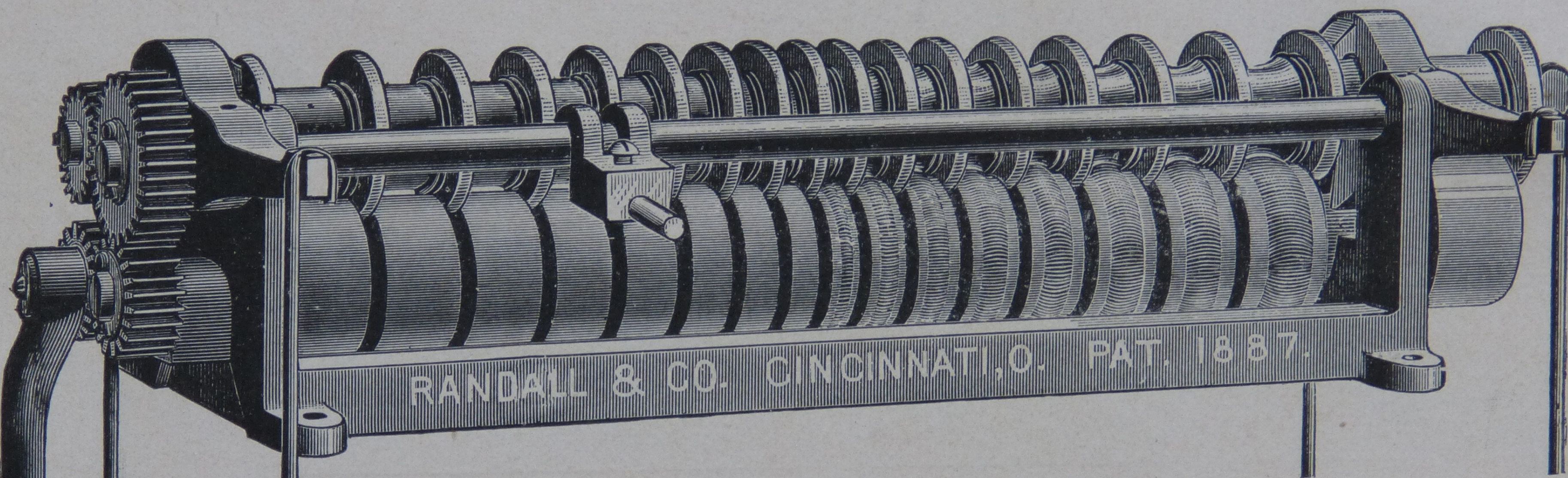
ALL IRON FRAME. LOWER ROLL STEEL.

No. 1. Creases Flat, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$ Round Edge, Single Crease, and Finishes
 $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$ Round Edge, No Crease..... **\$35.00**
 Diameter of Shaft Ends, $\frac{3}{4}$ inch.

Nos. 2, 2½, 3, 3½ Patent Creasing Machine.

4-COG
GEAR

T
H
E
B
E
S
T



- | | |
|--|----------------|
| No. 2. Creases ½ to 1¾ inch Flat, and ½ to 1½ inch Raised Double Crease | \$35.00 |
| No. 2½. Creases ½ to 1¾ inch Flat, Round Edge, Single Crease, and ½ to 1½ inch Raised, Double Crease..... | 35.00 |
| No. 3. Creases ½ to 1¾ inch Flat, Double Crease, and ½ to 1½ inch Flat, Round Edge, Single Crease..... | 35.00 |
| No. 3½. Creases ½ to 1¾ inch Flat, and ½ to 1½ inch Raised, Round Edge, Single Crease..... | 35.00 |

Any other style Straight Crease, as shown in sample Crease cut (page 6), to order.

Diameter of Shaft Ends, ¾ inch.

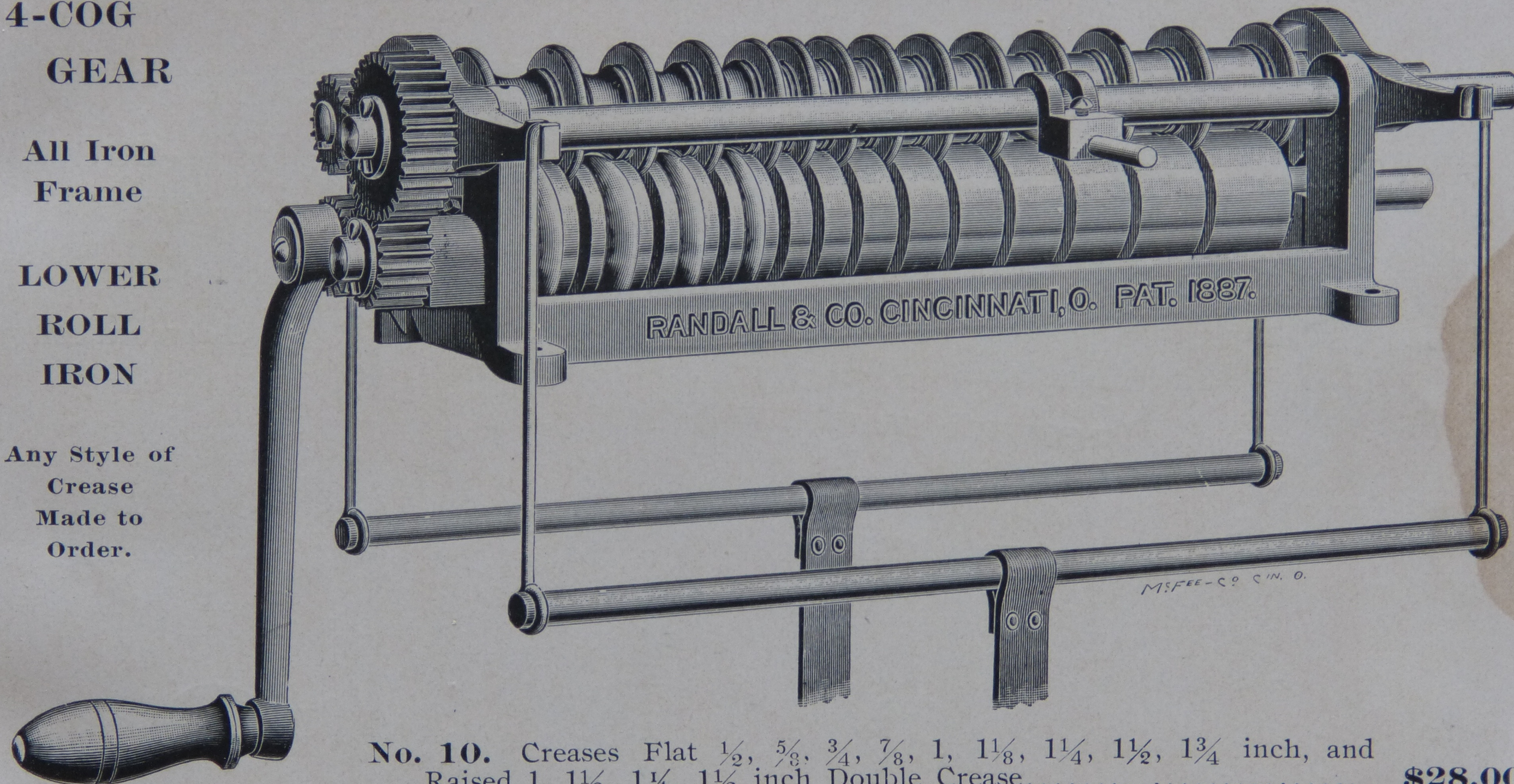
Nos. 10, 10½, 11 Patent Creasing Machine.

4-COG
GEAR

All Iron
Frame

LOWER
ROLL
IRON

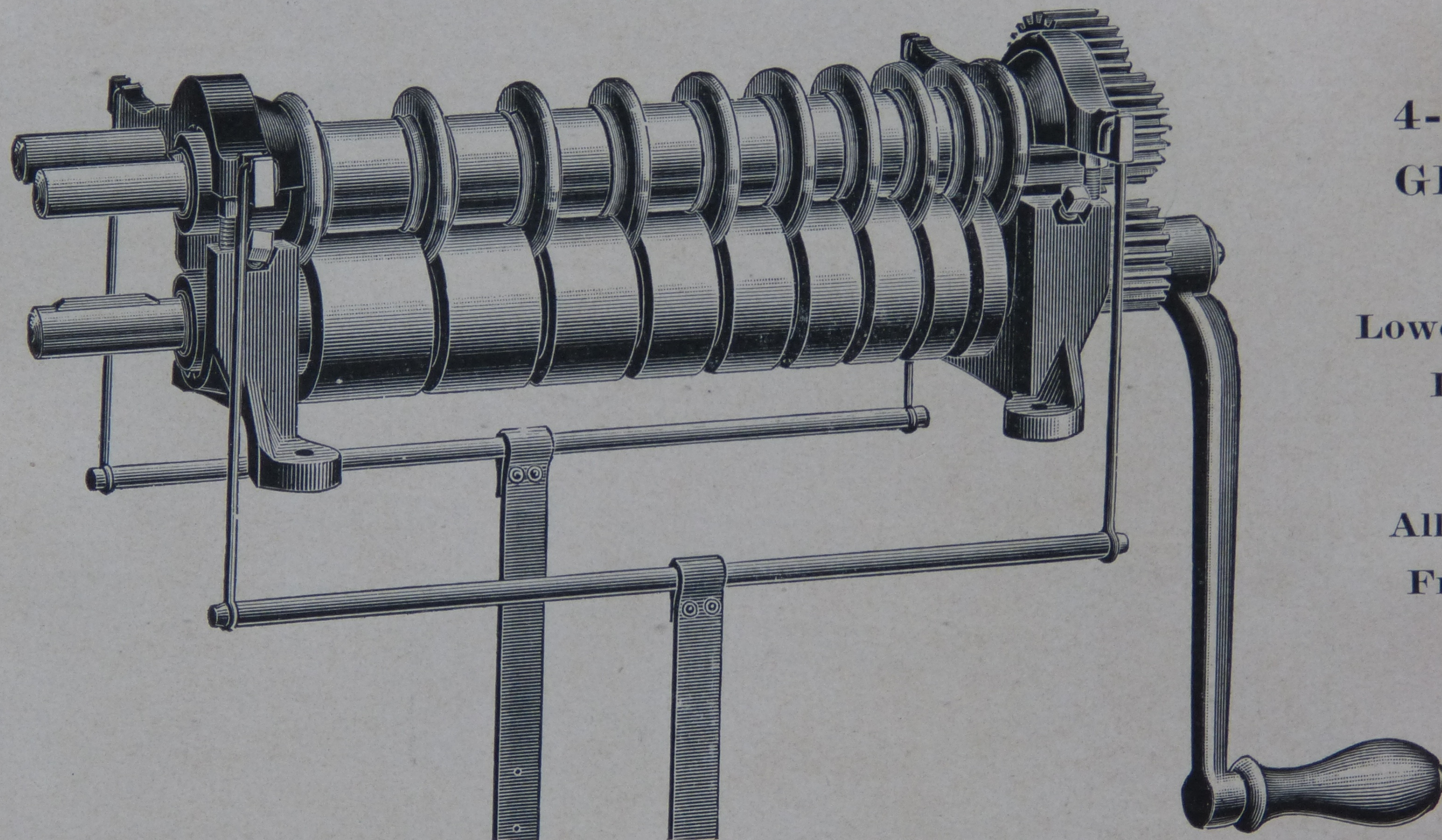
Any Style of
Crease
Made to
Order.



No. 10.	Creases Flat $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$ inch, and Raised 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$ inch Double Crease.....	\$28.00
No. 10½.	Creases Flat $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$ inch Round Edge, Single Crease, and Raised 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$ inch Double Crease.....	28.00
No. 11.	Creases Flat $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$ inch and Raised 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$ inch Round Edge, Single Crease.	28.00
Any style of Roll with $\frac{3}{4}$ inch hole may be worked on the End Shafts of our machines.		

Nos. 4, 4½ and 5 Patent Creasing Machine.

Patented 1887.



4-COG
GEAR

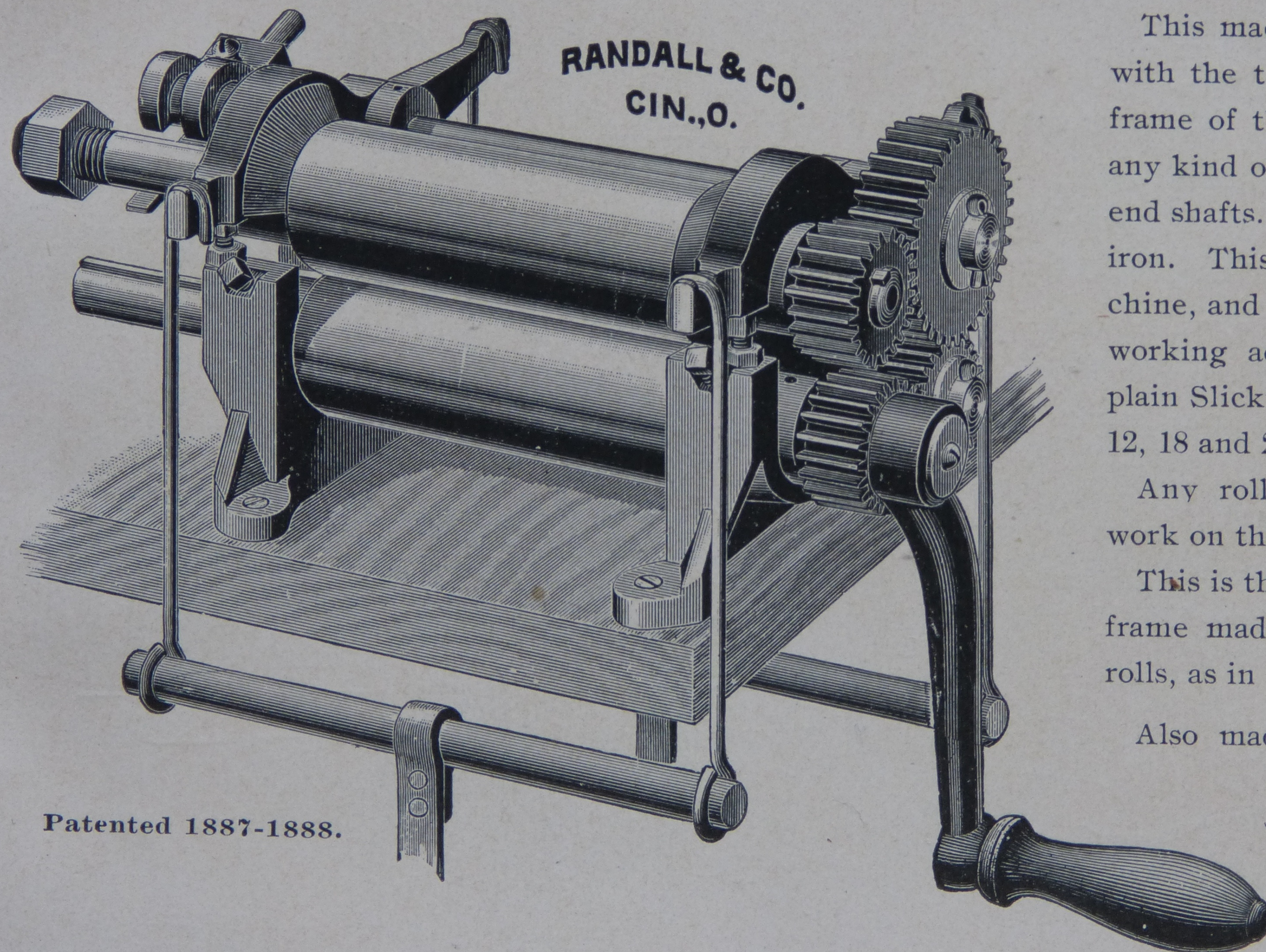
Lower Roll
Iron

All Iron
Frame

No. 4.	Creases $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$ and $1\frac{3}{4}$ inch Flat, Double Crease	\$24.00
No. 4½.	Creases $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$ and $1\frac{3}{4}$ inch Flat, Round Edge, Single Crease.....	24.00
No. 5.	Finishes $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$ and $1\frac{3}{4}$ inch Flat Straps, Round Edge, No Crease (see page 6), No. 10 Style.....	24.00

Diameter of Shaft Ends, $\frac{3}{4}$ inch.

No. 6 Slicking and Creasing Machine.



This machine is for slicking stock with the two plain rolls seen in the frame of the machine, and for using any kind of an adjustable roll on the end shafts. The shafts are of wrought iron. This is a strong, well-built machine, and the best machine made for working adjustable rolls. The two plain Slicking Rolls are 6 inches long. 12, 18 and 24-inch rolls made to order.

Any roll with $\frac{3}{4}$ inch hole will work on this machine.

This is the best single-roll creasing frame made. Machine, with 6-inch rolls, as in cut, **\$20.00**

Also made with attachments that make it the best **Embossing Machine,**

\$25.00


NOS. 7, 8, 9 Patent Creasing Machine.

No. 7. Creasing $\frac{1}{2}$ to $1\frac{3}{4}$ inch
Flat, and $\frac{1}{2}$ to $1\frac{1}{2}$ inch Rais-
ed, lower rolls iron..... **\$28.00**

No. 8. Creasing $\frac{1}{2}$ to $1\frac{3}{4}$ inch
Flat, lower rolls iron..... **20.00**

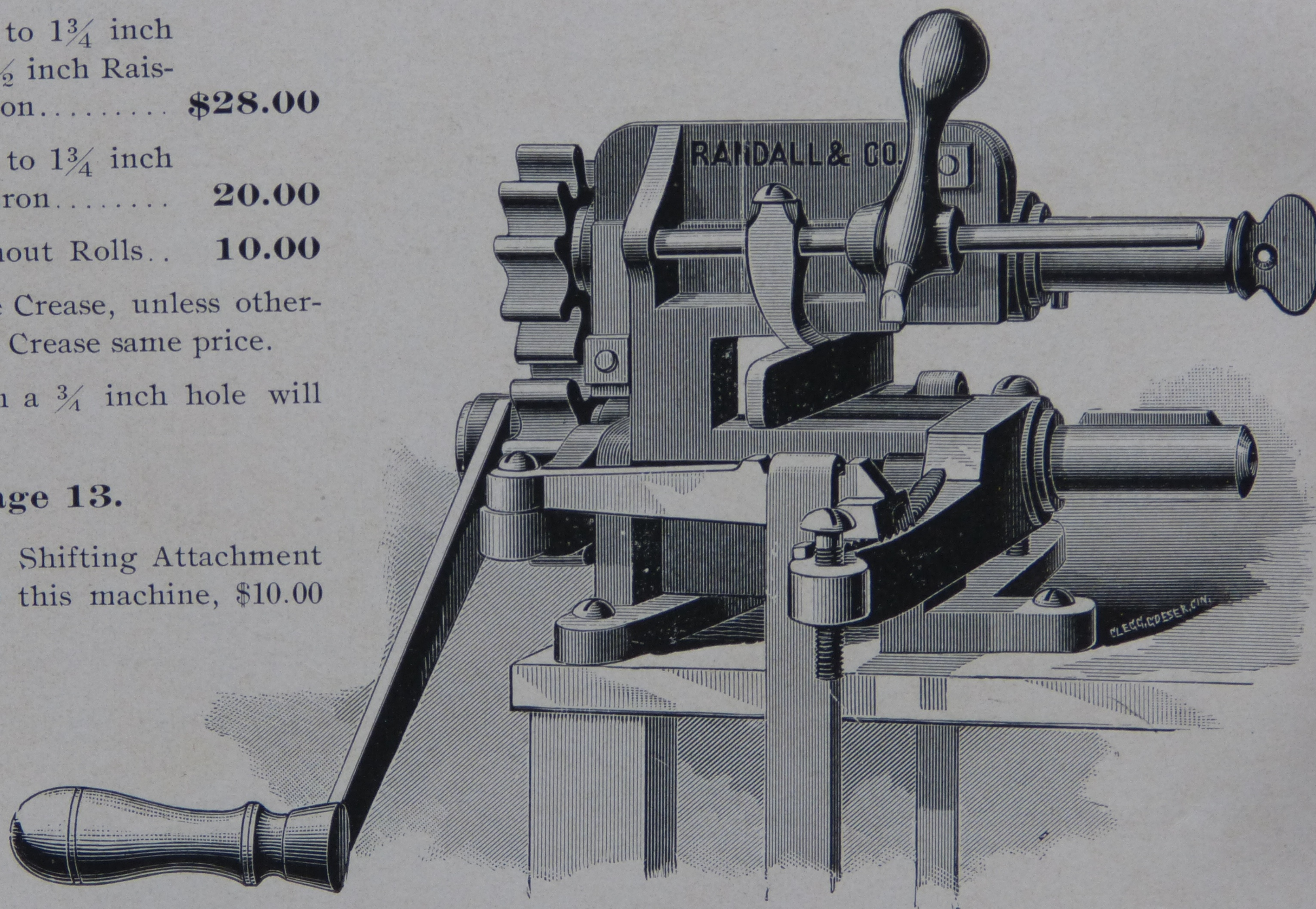
No. 9. Frame, without Rolls.. **10.00**

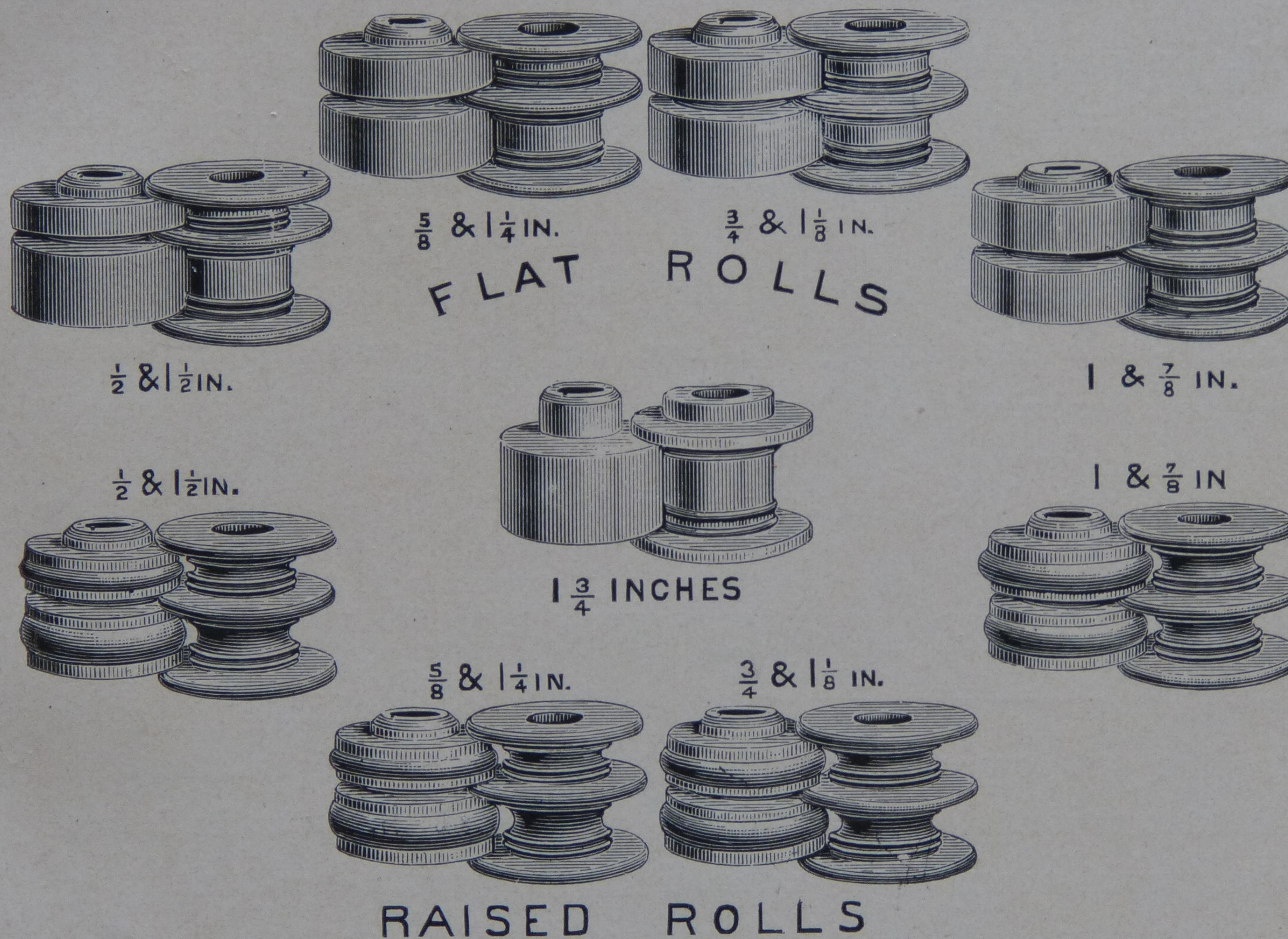
Rolls made Double Crease, unless other-
wise ordered. Single Crease same price.

 Any Roll with a $\frac{3}{4}$ inch hole will
work on this frame.

See Page 13.

Clutch Pulley and Shifting Attachment
(page 5), attached to this machine, \$10.00
extra.





This cut shows the rolls that go with Nos. 7 and 8 Creasing Machines (Page 12). They are always made double crease, unless otherwise ordered.

See page 6 for various styles of crease.

Rolls made Single Crease at same price.

POWER CREASING MACHINES.

ALL Power Creasing Machines are made in general as shown by the cut of the Power Round-Edge Slicking and Finishing Machine (page 15), with All Iron Frame, Upper and Lower Rolls of Iron or Steel, Special Strap Turner, Four-Cog Gear, Clutch Pulley and Shifting Attachment and Bench Hangers.

The Rolls may be made in any combination of widths and styles of crease desired.

We give our special attention to constructing Machines especially suited to the wants of the wholesale factory. Prices for any Special Machines cheerfully quoted on application.

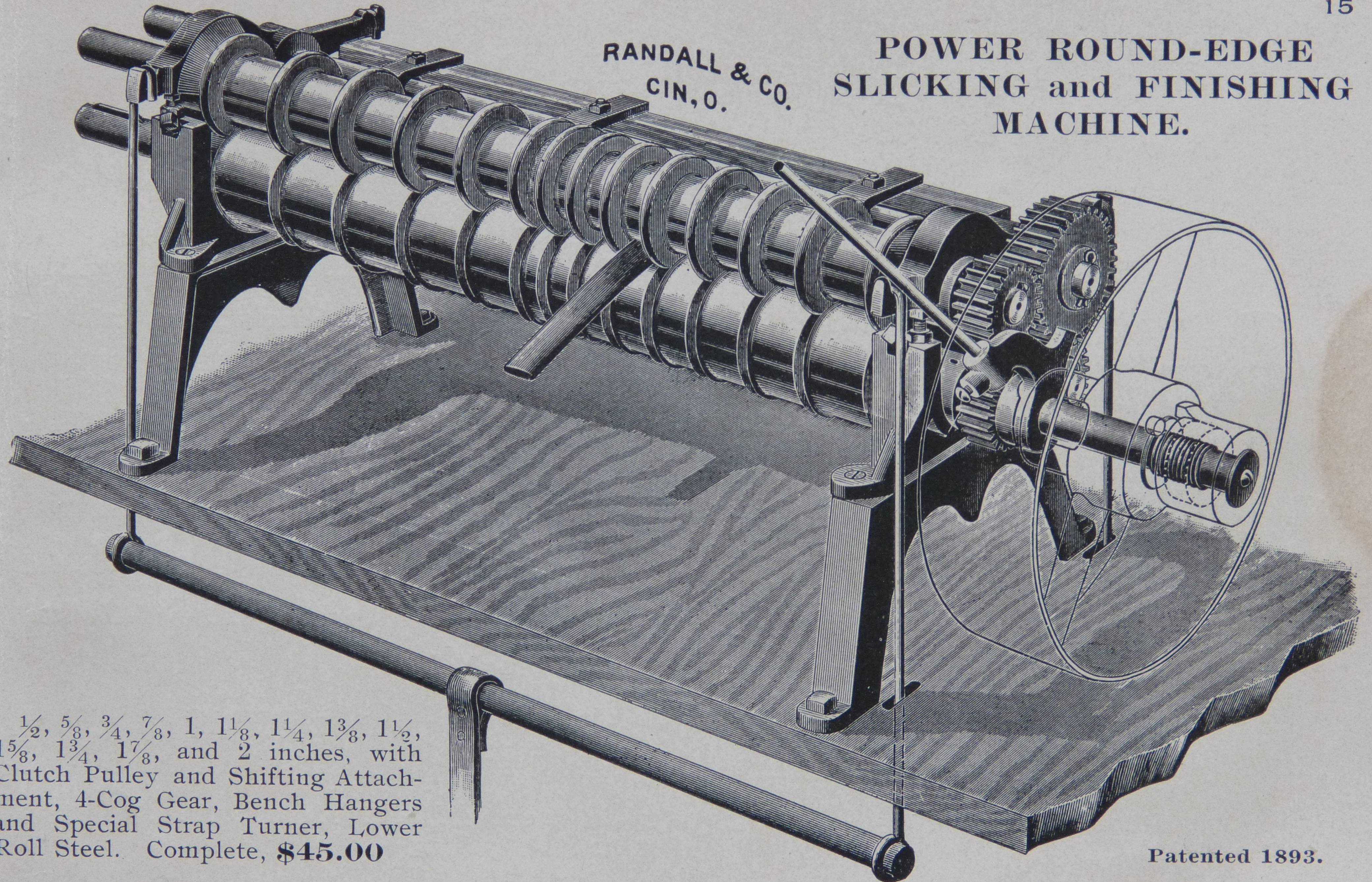


ROUND-EDGE STRAP WORK.

IN the manufacture of medium and low grades of single-strap Harness with rounded edge (no crease) it is impossible to produce the quantity and quality of Harness at the lowest price without using a Machine, as shown in the cut, for slicking the surfaces and finishing the edges of the strap at the same time. With the aid of our Strap Trimmer, page 28, and the Machine, page 15, from 40 to 50 cents can be saved on every set of Harness.

RANDALL & CO.
CIN, O.

POWER ROUND-EDGE SLICKING and FINISHING MACHINE.



$\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$,
 $1\frac{5}{8}$, $1\frac{3}{4}$, $1\frac{7}{8}$, and 2 inches, with
Clutch Pulley and Shifting Attach-
ment, 4-Cog Gear, Bench Hangers
and Special Strap Turner, Lower
Roll Steel. Complete, \$45.00

Patented 1893.

Patent Adjustable Folding Roll.

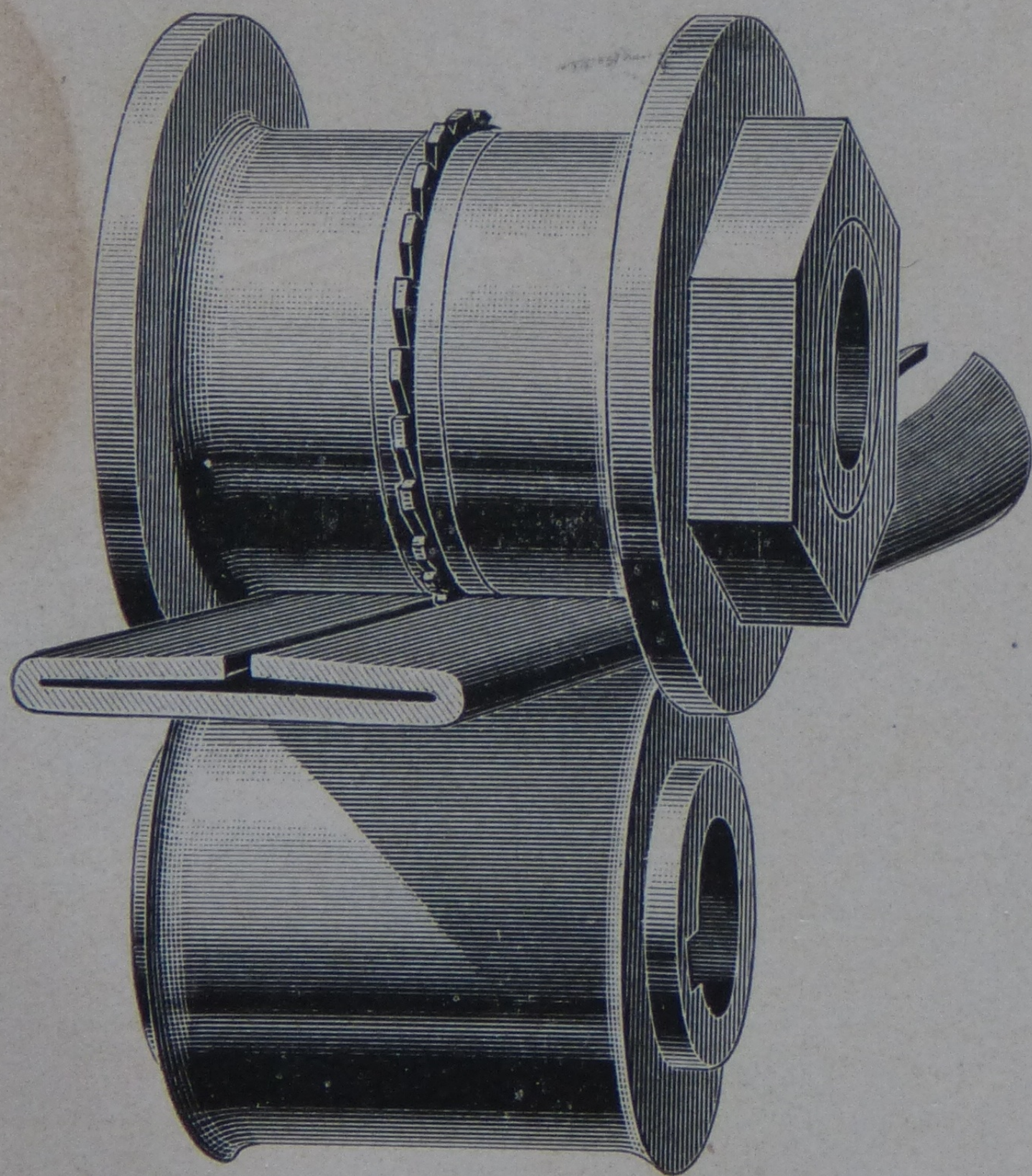
Folds Breeching and Breast Collars.

These Rolls are made adjustable. The different widths are made by placing washers either side of the wrought-iron tongue.

The wrought-iron tongue acts as a divider, or gauge, as the Fold is fed through, and causes the leather to be folded uniformly.

When used on Machines the leather should be fed in by the operator using both hands. These Rolls fold very rapidly.

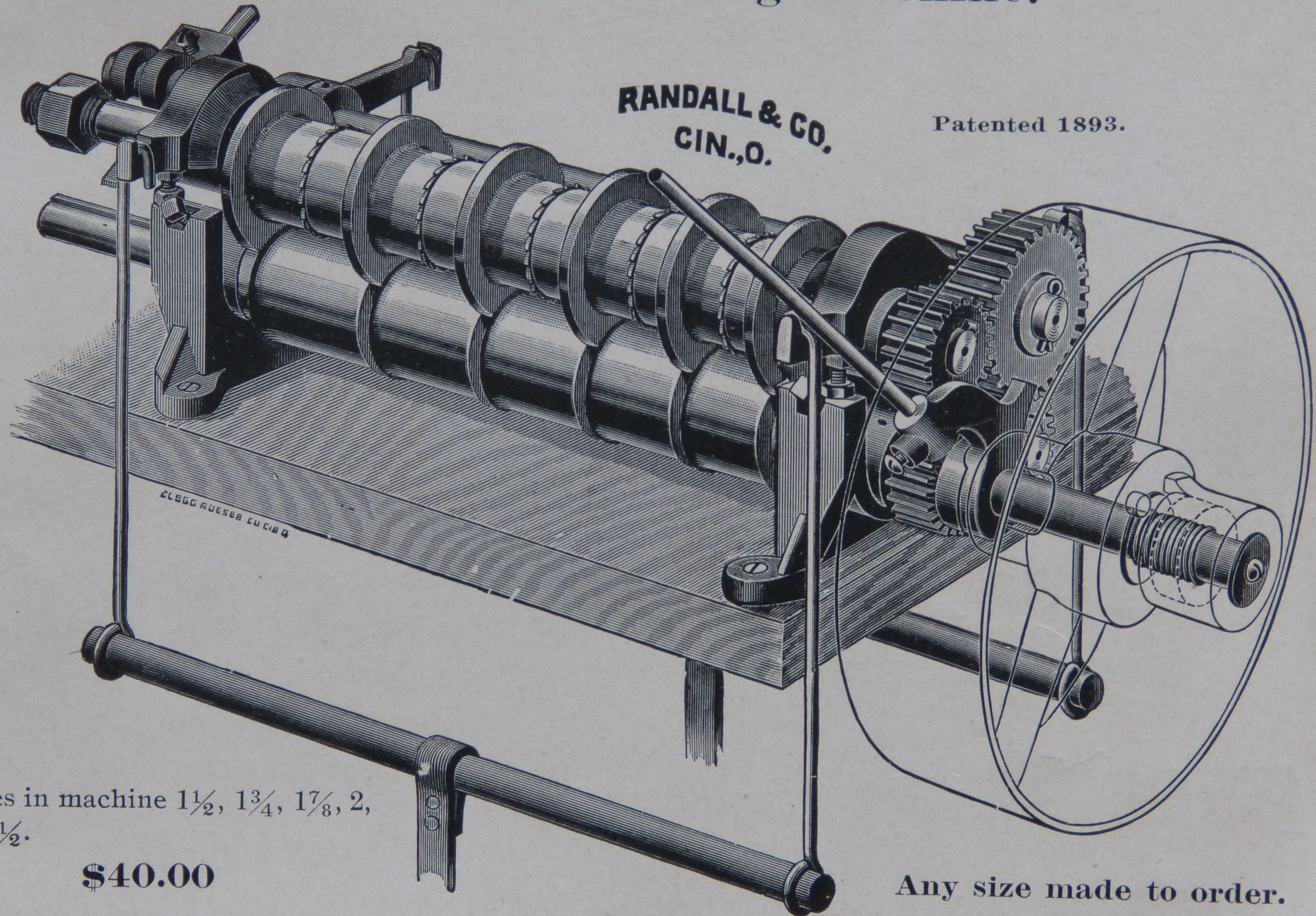
The Roll complete consists of one upper Adjustable Roll, with $1\frac{1}{2}$, $1\frac{3}{4}$, $1\frac{7}{8}$, 2, and $2\frac{1}{4}$ inch lower Iron Rolls, as seen in the cut.....**\$12.00**



Power Roll Folding Machine.

RANDALL & CO.
CIN., O.

Patented 1893.



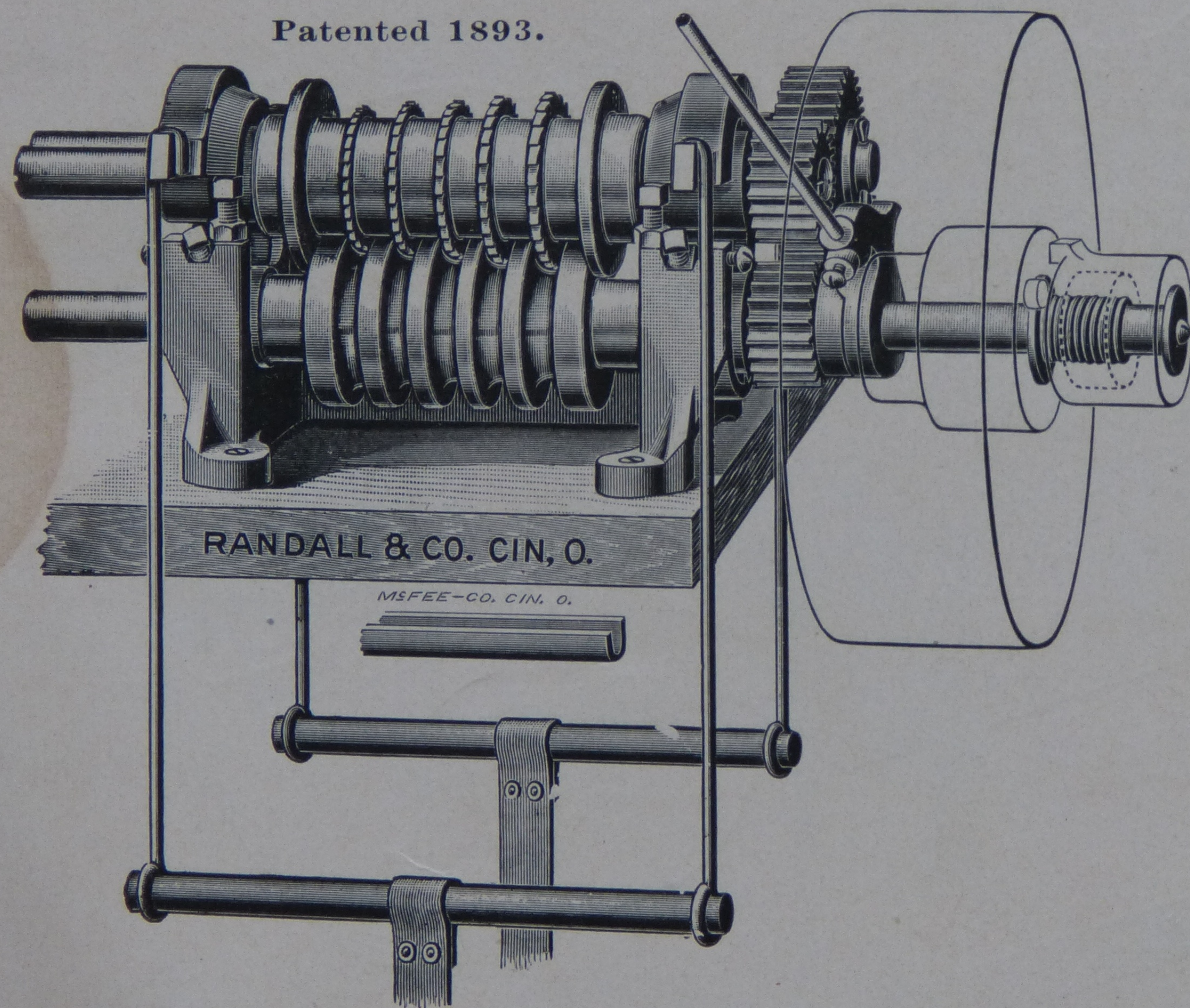
Sizes in machine $1\frac{1}{2}$, $1\frac{3}{4}$, $1\frac{7}{8}$, 2,
 $2\frac{1}{4}$, $2\frac{1}{2}$.

\$40.00

Any size made to order.

Round Breaking Machine.

Patented 1893.



Rounds for Lines, Breeching, Stays, Winker Stays, etc., can be broken or formed for the filling with the Breaking Machine or Breaking Rolls in one-tenth the time and far more uniformly and even than it can be done by hand.

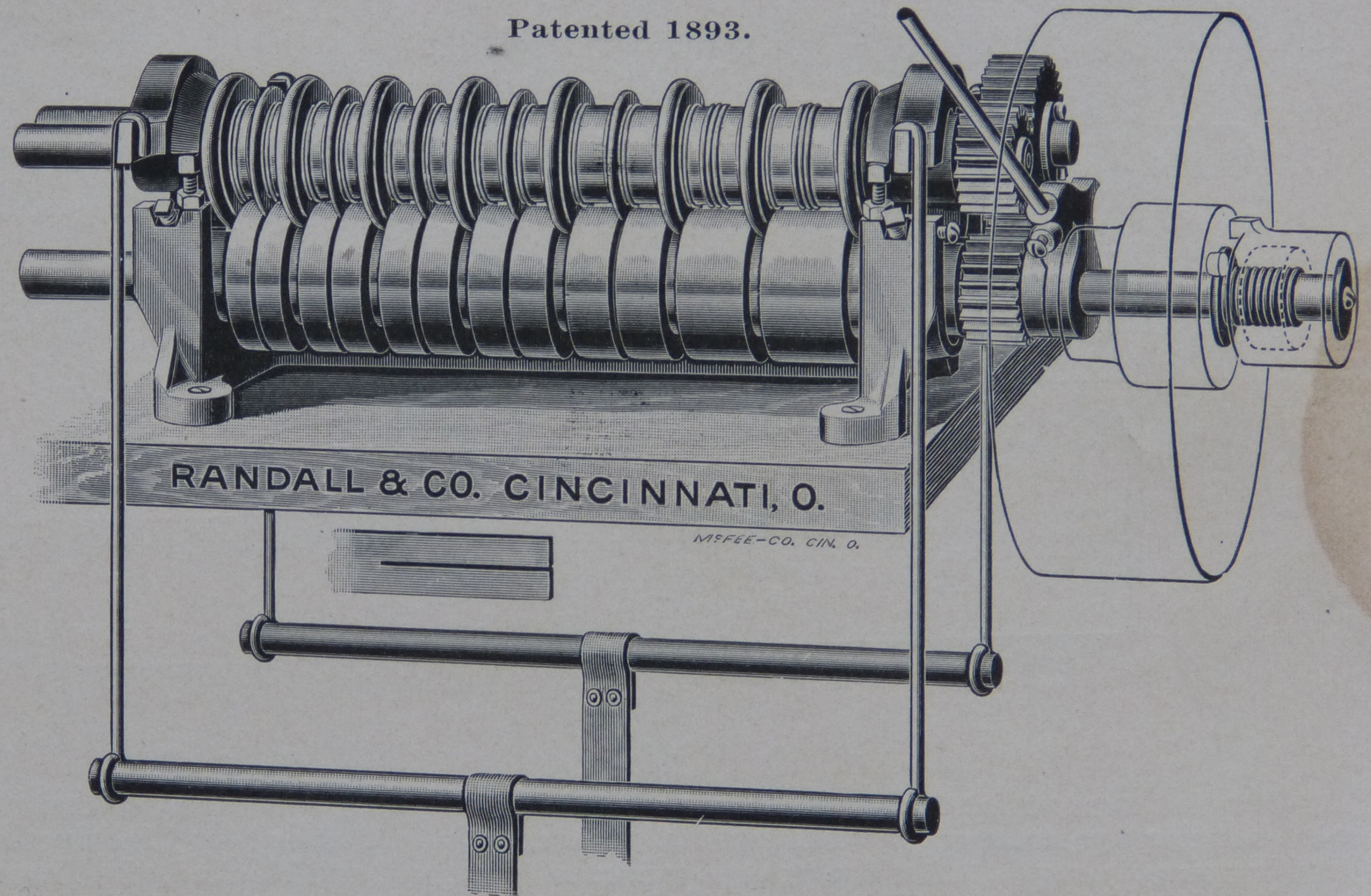
We have made these Rolls and Machines for several years, and can say they will soon pay for themselves in any Harness Factory. Round Breaking Machine, with $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, and $1\frac{1}{8}$ inch widths, with Clutch Pulley and Shifter for power,

\$35.00

Crown Piece and Turnback Creasing Machine.

Much time can be saved in creasing Crown Pieces, Overchecks, and Turnbacks with a Special Machine or Single Rolls, as shown in cut of the Crown Piece and Turnback Creasing Machine. They are made to crease the four edges of the slit parts at one time. A saving of 100% can be made by creasing split Crown Pieces with a machine or rolls of this character over the old way of creasing one-half of the split Crown Piece at a time. With this machine the Crown Piece is creased on the two forks almost to the very end of the split, very much nearer than can be done with an ordinary Creasing Roll.

Patented 1893.

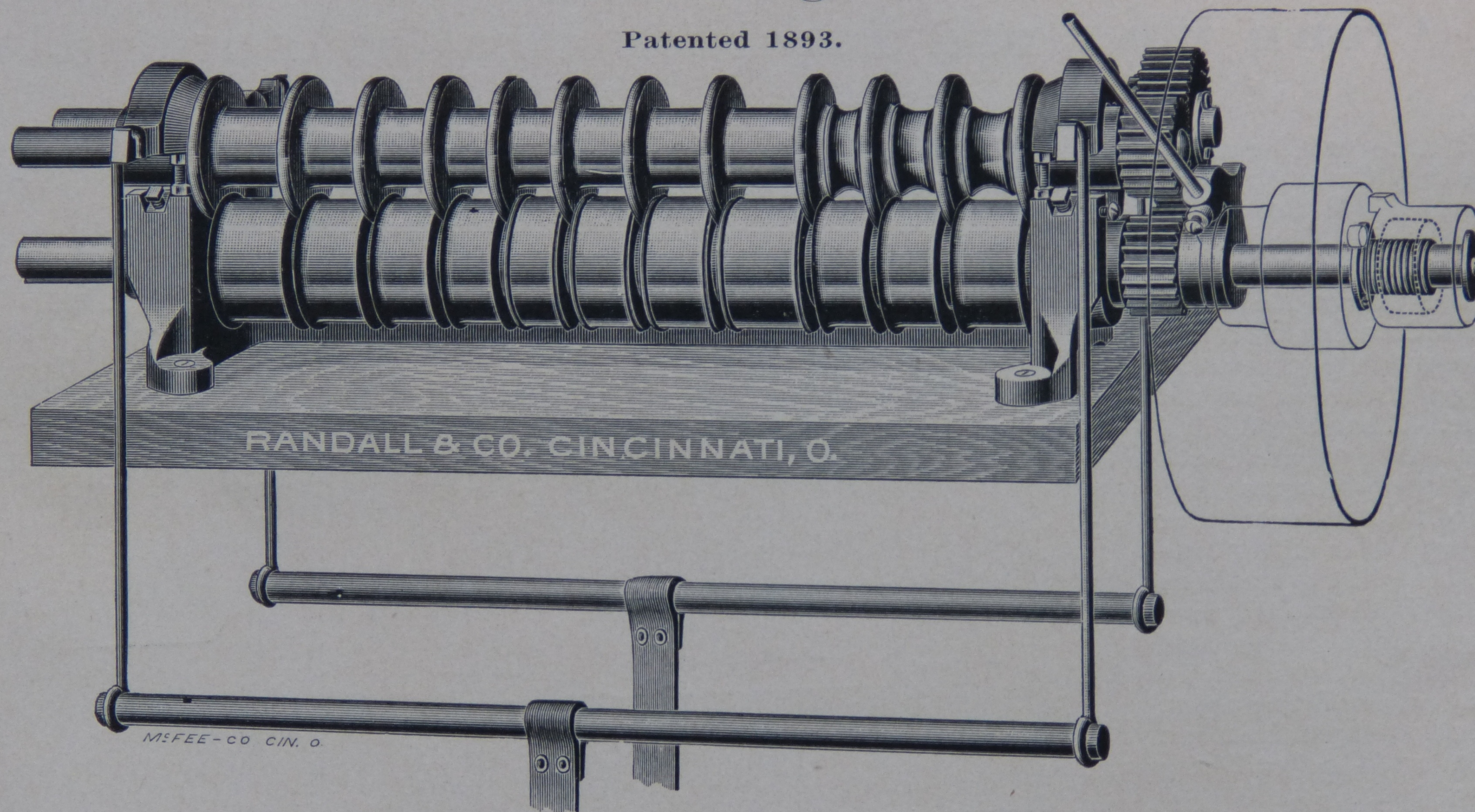


The machines are built to crease any combination of widths desired, $\frac{1}{2} \times \frac{1}{2}$, $\frac{5}{8} \times \frac{5}{8}$, $\frac{3}{4} \times \frac{3}{4}$, $\frac{1}{2} \times \frac{5}{8}$, $\frac{1}{2} \times \frac{3}{4}$, $\frac{1}{2} \times \frac{7}{8}$, $\frac{1}{2} \times 1$, $\frac{5}{8} \times \frac{3}{4}$, $\frac{5}{8} \times \frac{7}{8}$, $\frac{5}{8} \times 1$, etc. Rolls made to crease the edges and slit ends only, $\frac{1}{2} \times \frac{5}{8}$, $\frac{5}{8} \times \frac{3}{4}$, inch, etc., any width desired. Lower Rolls of iron, \$4.50 per pair.

Machines built in any combination of widths desired, for hand or power, range in price from **\$25.00** upwards. Exact prices quoted on application.

Trace Finishing Machine.

Patented 1893.



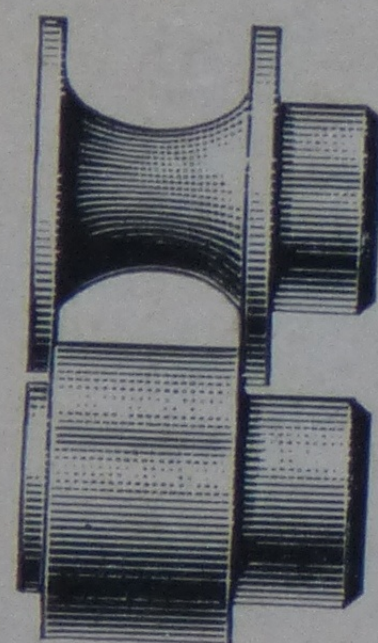
Our past experience enables us to produce Trace Finishing Machines that will finish Traces and Bearers in a most satisfactory manner. These can not be successfully finished by Machines and Rolls such as are used for creasing single straps. After the trace is trimmed, punched, and blacked, the Trace Finishing Machine and Rolls will finish the Trace at the least cost possible, and very much better and quicker than can be done by hand.

Trace Finishing Machines made to finish three styles of Traces, 1, 1 $\frac{1}{8}$, 1 $\frac{1}{4}$, 1 $\frac{1}{2}$, inch, "B", Flat, single-edge, crease; 1, 1 $\frac{1}{8}$, 1 $\frac{1}{4}$, and 1 $\frac{1}{2}$ inch, "D," Flat, round edge, no crease: 1, 1 $\frac{1}{8}$, and 1 $\frac{1}{4}$ inch, "C," raised round edge, no crease—with clutch and pulley attachment, bench hangers and special strap turner, complete for power **\$55.00**

Other combinations of widths and styles made to order. Prices quoted on application.

Trace and Bearer Finishing Rolls.

Shaft Tug Roll.



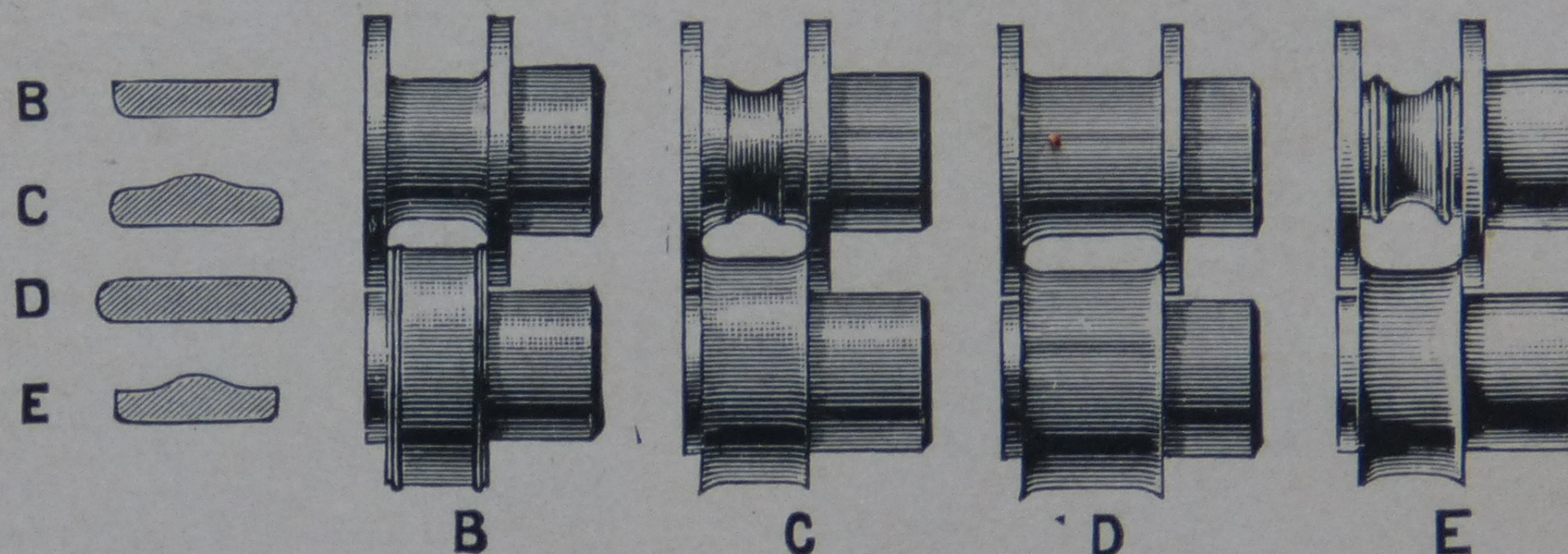
This roll makes the neatest and best shaft tug. Inside of tug is smoothly finished oval shape. Sizes, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$ in.

Any Width, \$3.50

With or without edge crease. $\frac{7}{8}$ to $1\frac{1}{2}$ inch.

All iron, any width, **\$3.50.**

SEE PAGE 20.



Trace and Bearer finishing Rolls, after years of use, have proven themselves to be the best device that can be made for quickly shaping and finishing the surfaces and edges of various styles of Traces and Bearers after trimming. In medium grades of Harness, Rolls of this character greatly improve the Trace and Bearer at a very small additional cost.

Style "B" finishes the edges of a flat Trace, and puts a narrow single crease on the edge of the Trace.

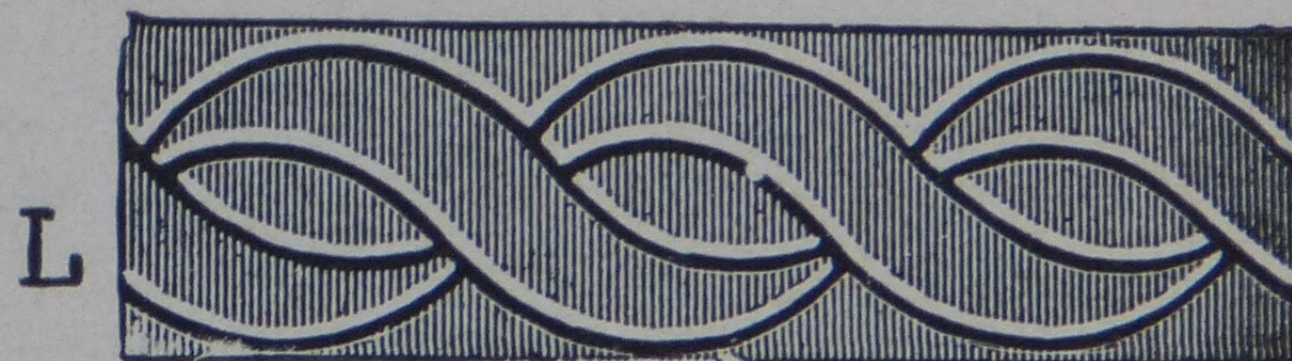
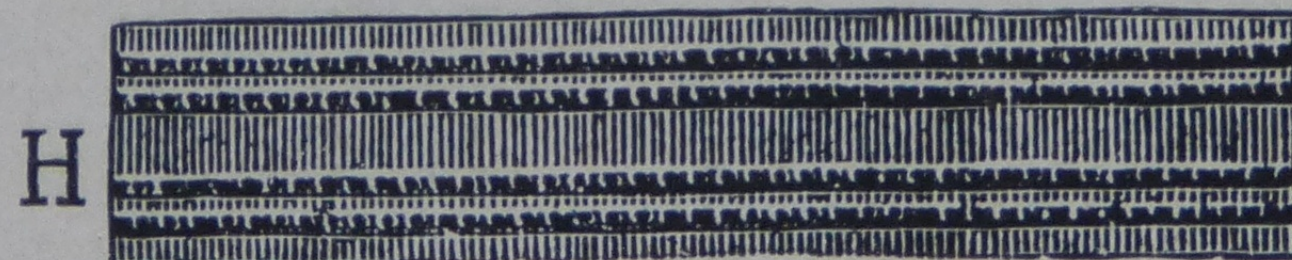
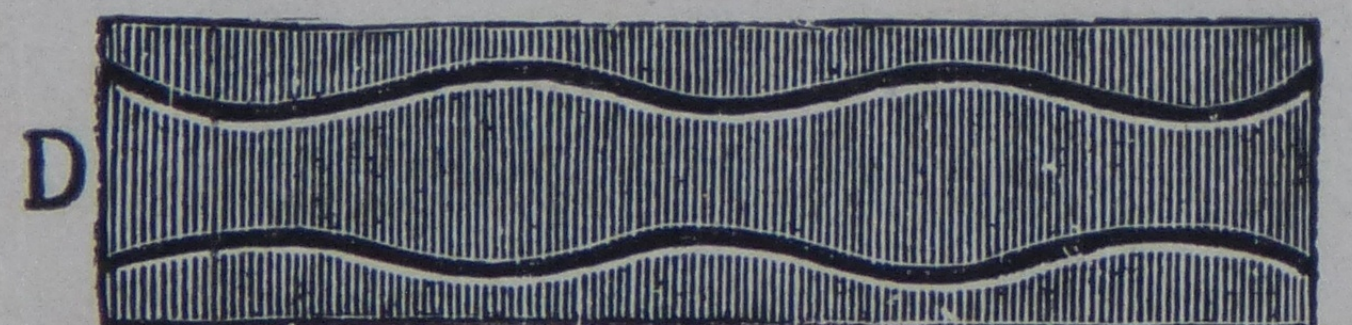
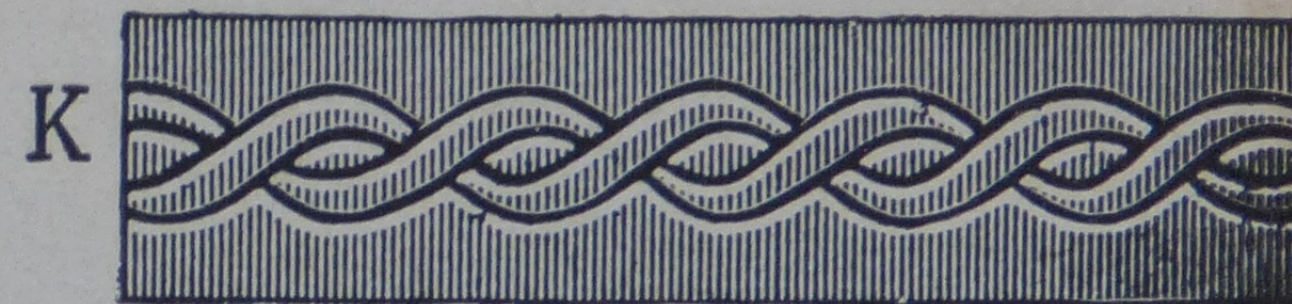
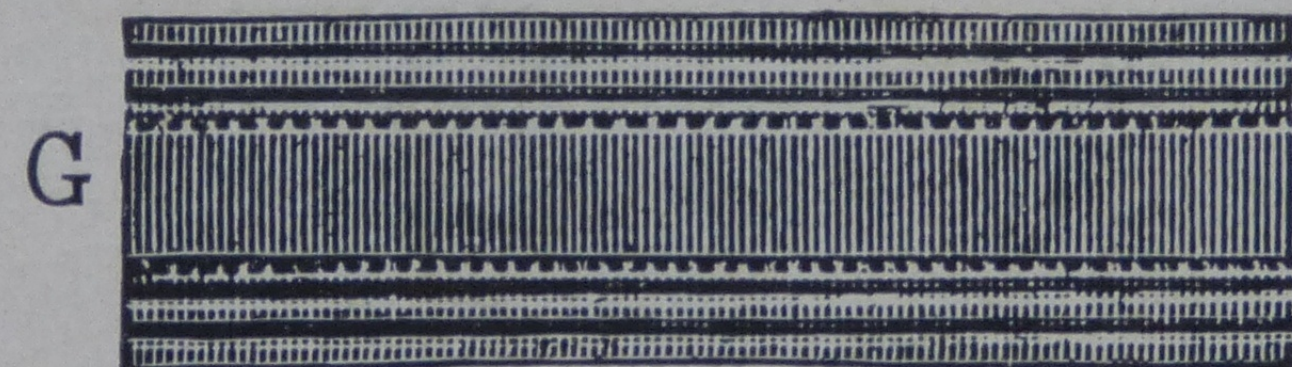
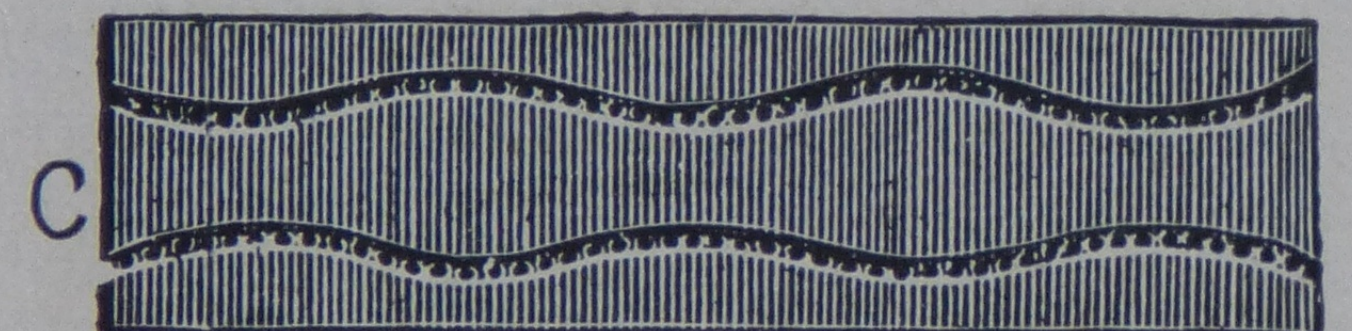
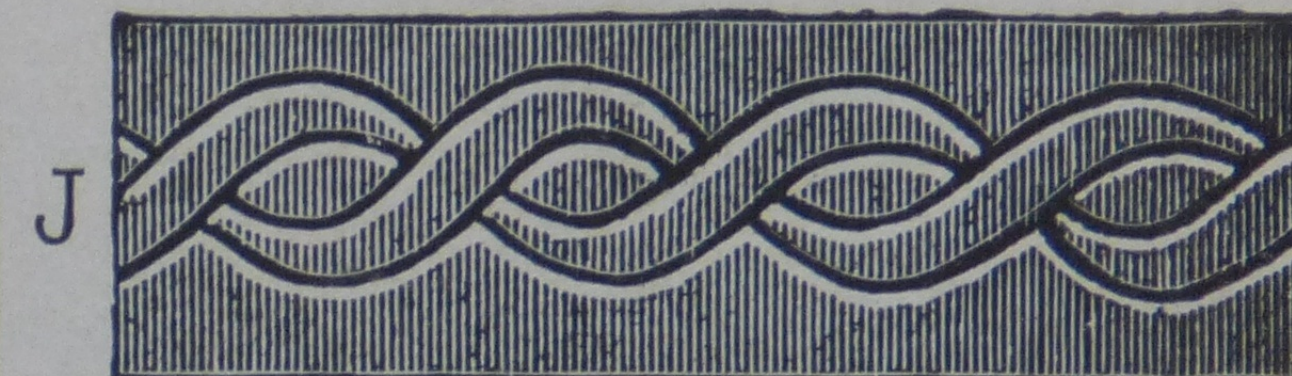
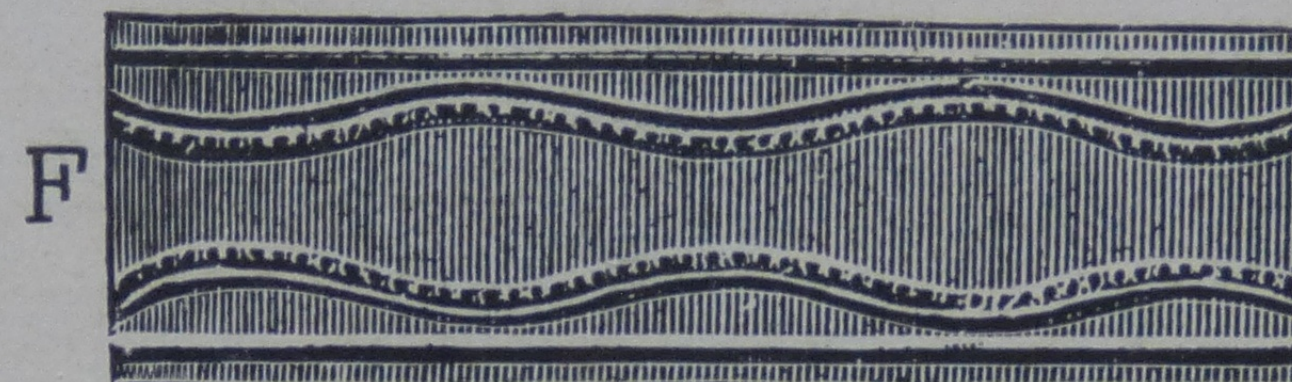
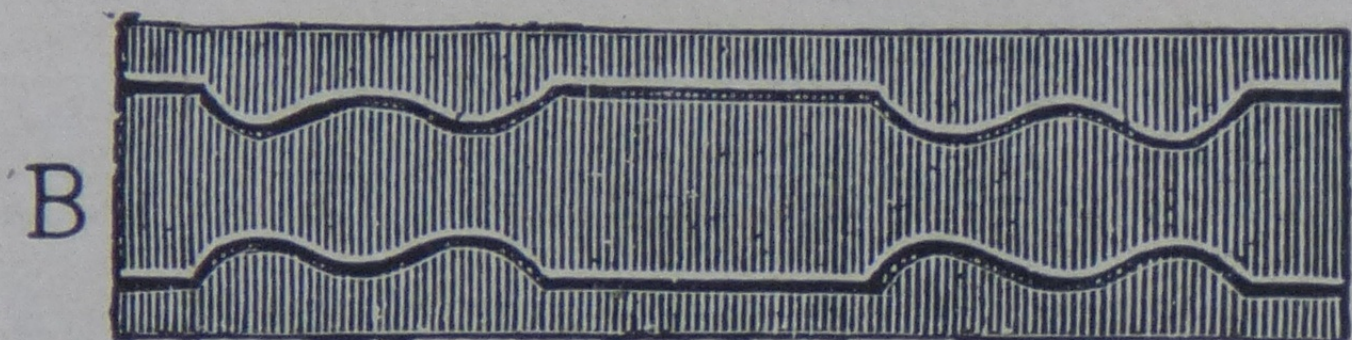
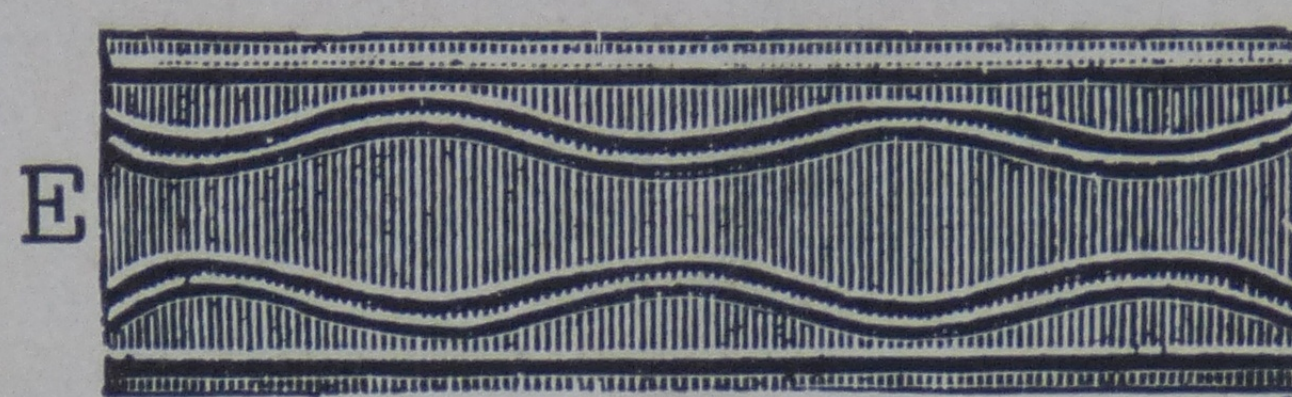
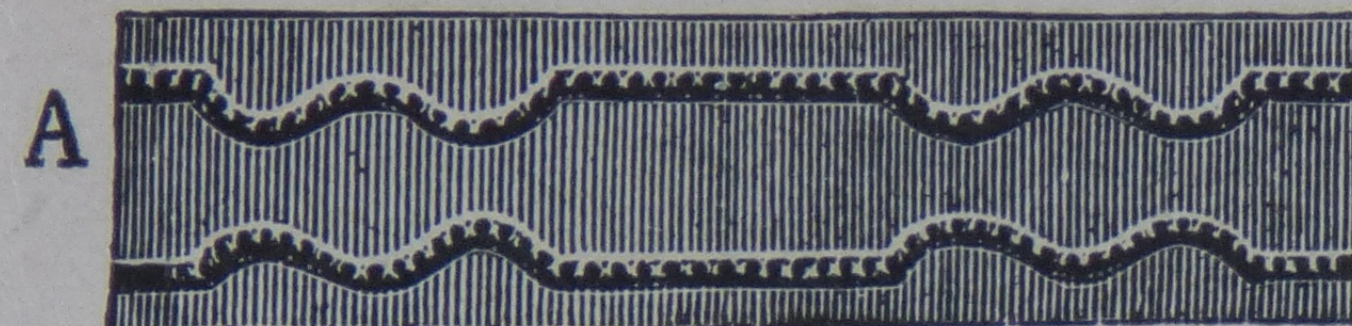
Style "C" finishes the edges of a raised-filled Trace, and rounds the upper edge without touching the stitching.

Style "D" is made with curved edges, and suited for finishing the rounded edges of flat Traces, and also slicks both the top and bottom of the Trace.

Style "E" finishes the sides of the Trace, and re-shapes the top of the Trace. With this Roll the over-stitch wheel must be used to set up the stitching after the Trace is finished by the Roll.

Style of Fancy Creases.

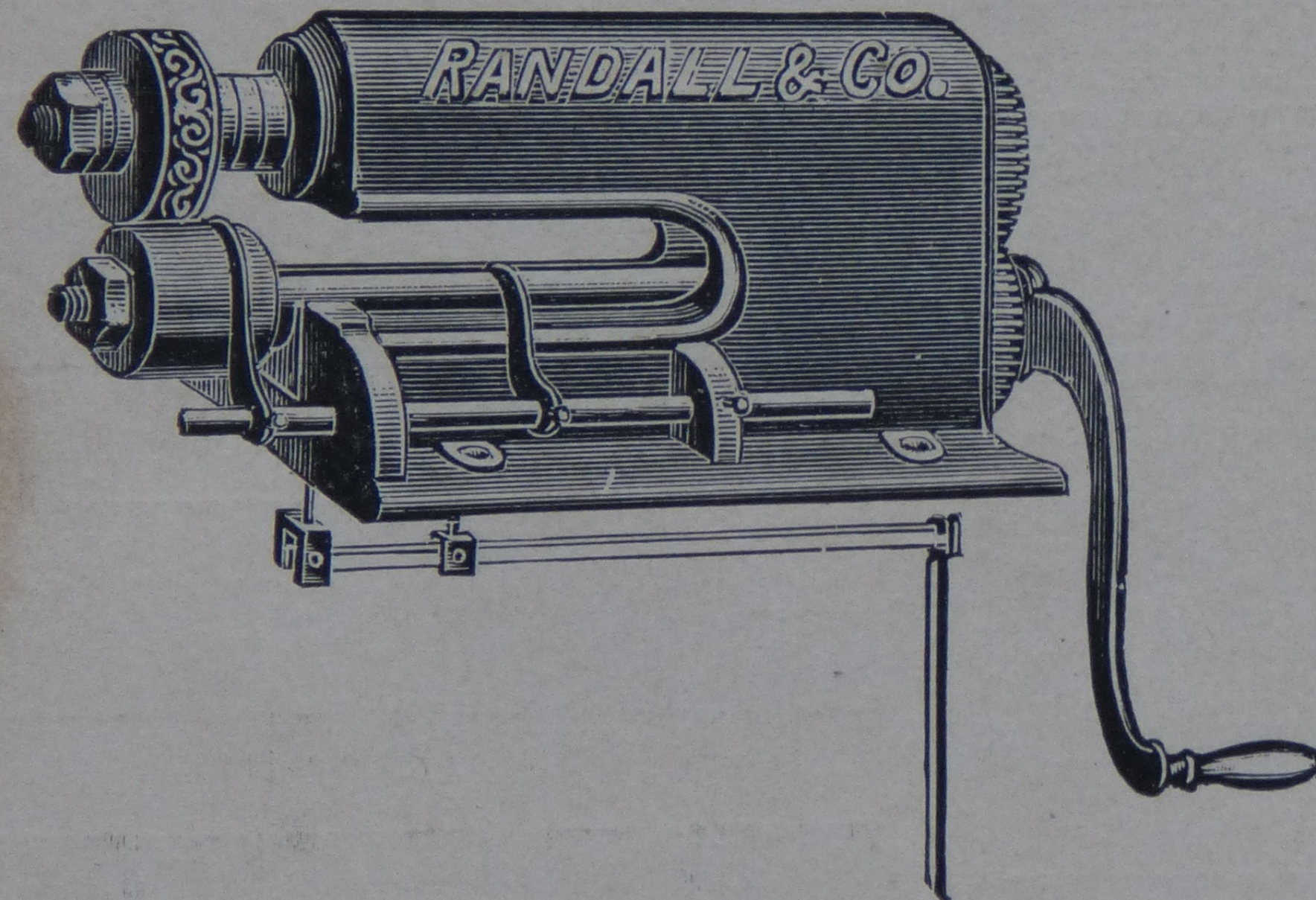
Rope Wave.



CREASING RINGS FOR ADJUSTABLE WAVE ROLL.

A, B, C, D— $\frac{1}{2}$ and $\frac{5}{8}$, one pair Rings,.....	\$2.00	E or F, $1\frac{1}{8}$, $1\frac{1}{4}$, or $1\frac{3}{8}$,.....	\$4.00
— $\frac{3}{4}$ to $1\frac{1}{2}$, “ “ “	2.00	G or H, 2 pair Rings, creasing $\frac{1}{2}$ to 2 inches	2.00
I, J, K, L, Brass, Engraved, $\frac{1}{2}$, $\frac{5}{8}$, or $\frac{3}{4}$	\$4.00	$\frac{7}{8}$ to $1\frac{1}{4}$	5.00

Embossing Machine.



This machine will emboss any distance from the edge desired.

Machine complete, without any embossing rolls.

Price, \$21.00

Embossing Rings.

Rings of any design and width with one inch hole, will work on our Embossing Machine; or can be made with $1\frac{3}{8}$ inch holes, and used on our Adjustable Wave Roll on page 22, and these Rolls can be used on any Creasing Machine having $\frac{3}{4}$ inch shaft.

The Rings are made of the best bronze metal. A few styles are shown on page 25. The styles shown are exact widths of the Rings. Prices on special patterns and widths quoted on application.

Prices Embossing Rings.

$\frac{1}{4}$ inch wide	.....	\$2.85
$\frac{3}{8}$ " "	.....	3.15
$\frac{1}{2}$ " "	.....	3.60
$\frac{5}{8}$ " "	.....	4.30
$\frac{3}{4}$ " "	.....	5.30
$\frac{7}{8}$ " "	.....	6.00
1 " "	.....	7.00
$1\frac{1}{8}$ " "	.....	7.25
$1\frac{1}{4}$ " "	.....	8.00

ANY SIZE.

Styles of Embossing.

ANY SIZE.

25

A



B



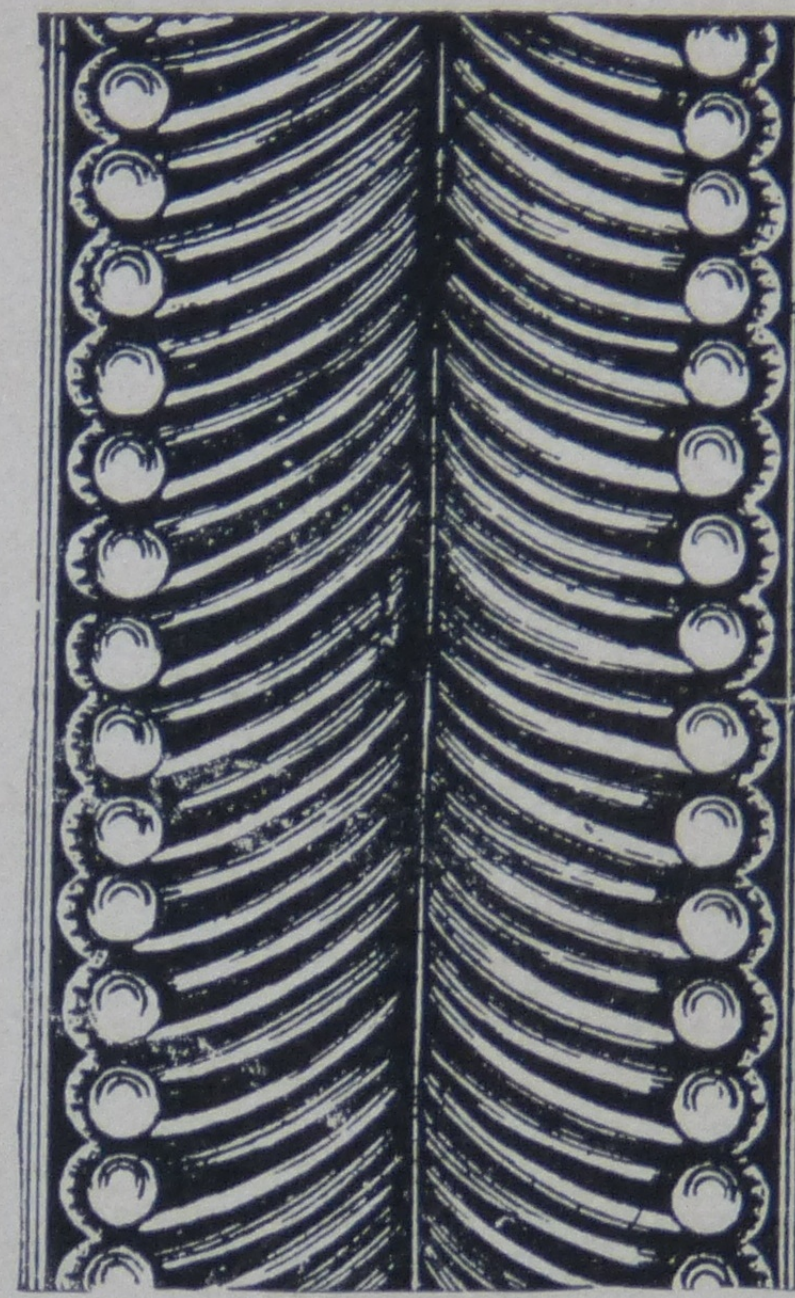
C



D



E



F



G



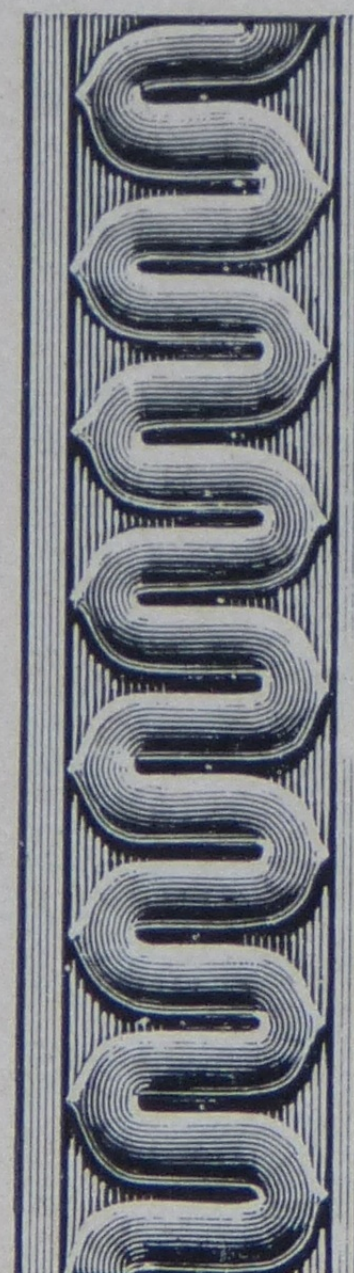
H



I



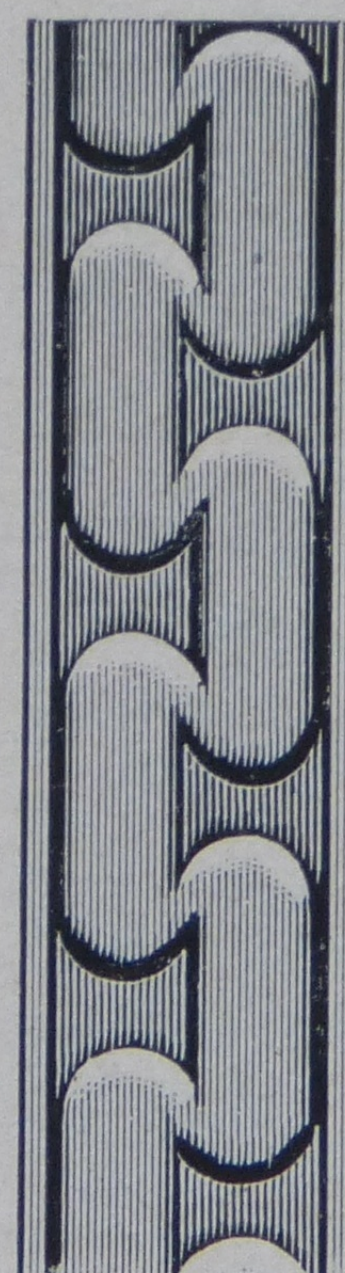
J



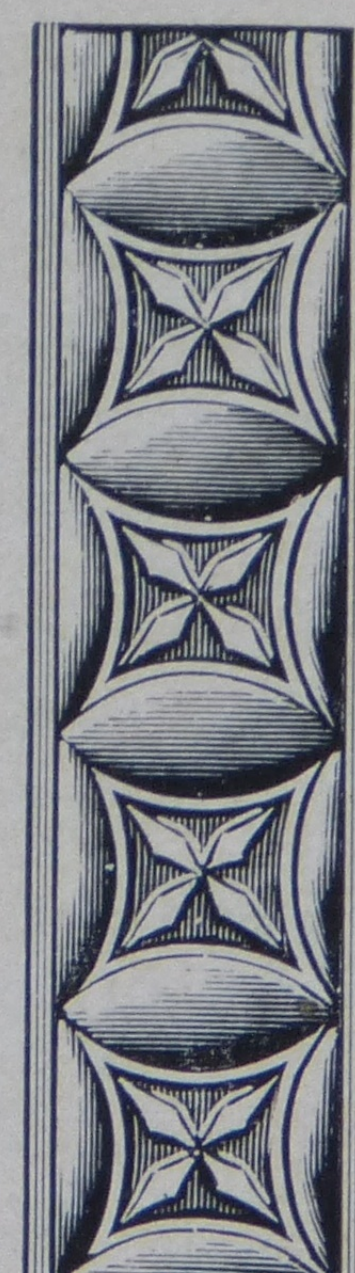
K



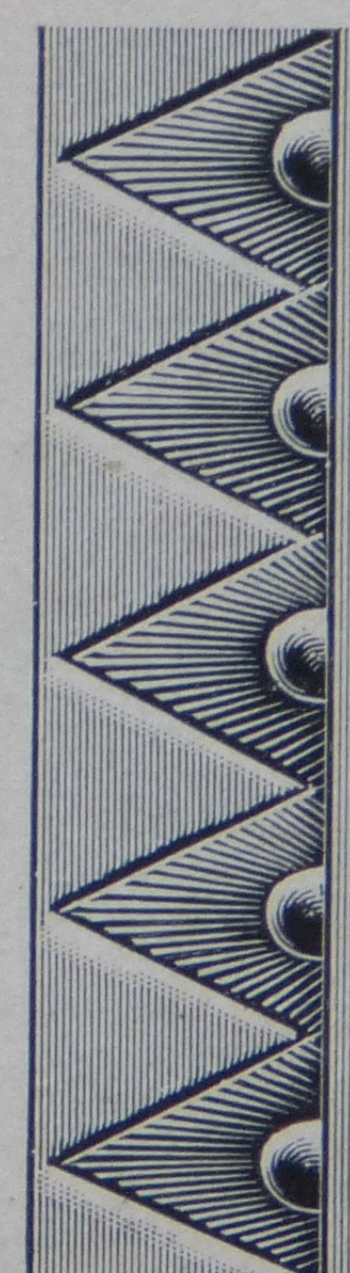
L



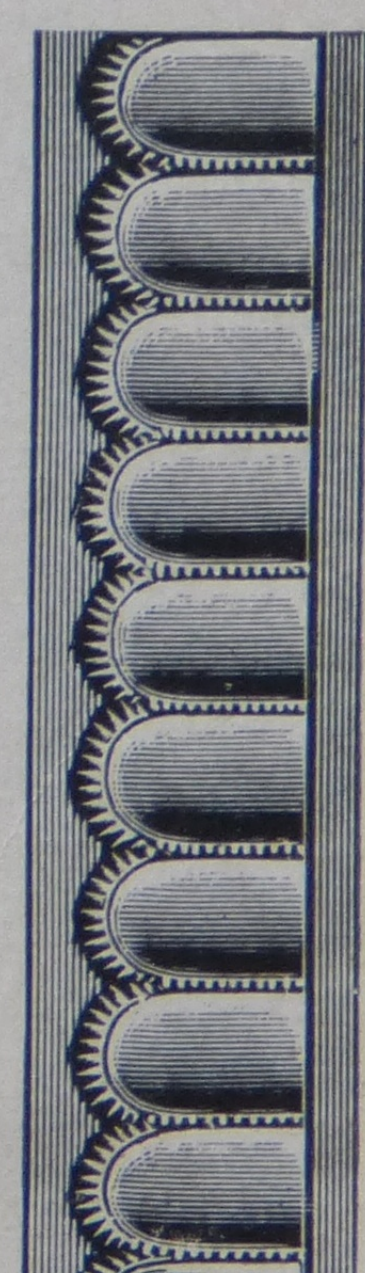
M



N



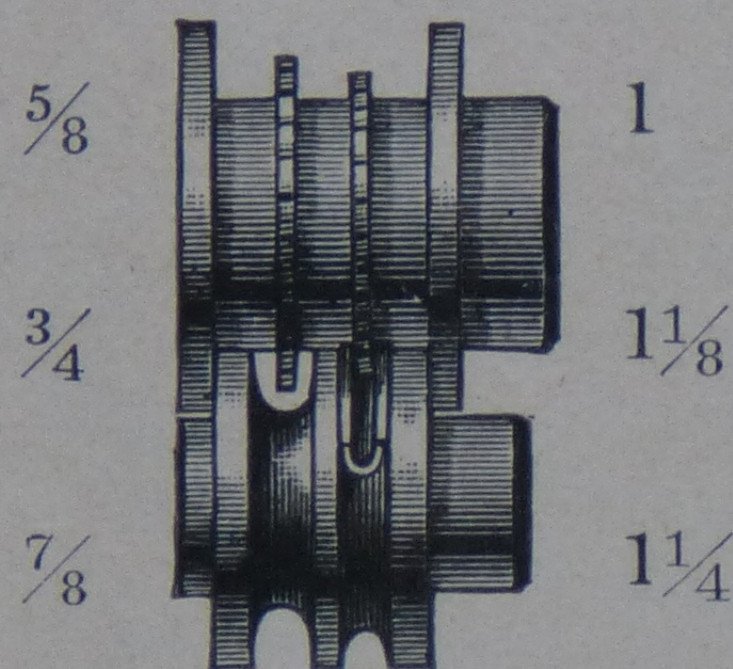
O



P

ANY
STYLE
MADE
TO
ORDER

Breaking Rolls for Rounds.



Rounds can be broken for filling with these Rolls uniformly and rapidly, and far better than can be done by hand.

They have been used for several years, and are highly valued by the trade.

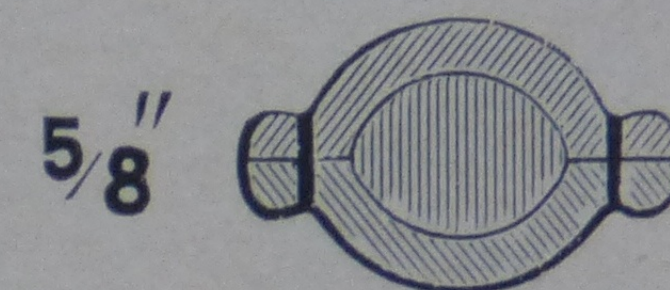
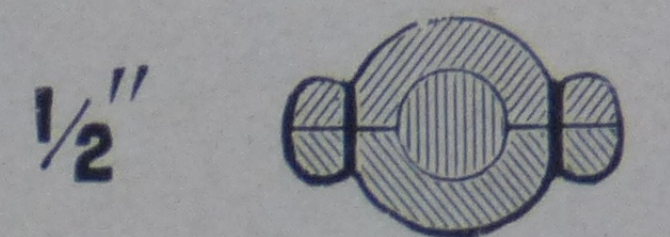
Any two widths may be put together in one Roll, as in cut **\$5.00**

The Rolls are built in sections on a spindle, the tooth-like flange in the center is of steel and can not be broken, and draws the stock through the curved lower roll.

We also make an extra upper Roll that is made to set up the Round and leave the inside of the Round in exactly the shape necessary for the filling to lay in, which makes it much more easy for stitching.

The Breaking Roll, with one upper Breaking Roll, and one upper Setting-Up-Roll, and one lower Roll..... **\$7.50**

Oval Line Rolls.



It is very difficult by hand to prepare the straps for making a neat oval or beaded line.

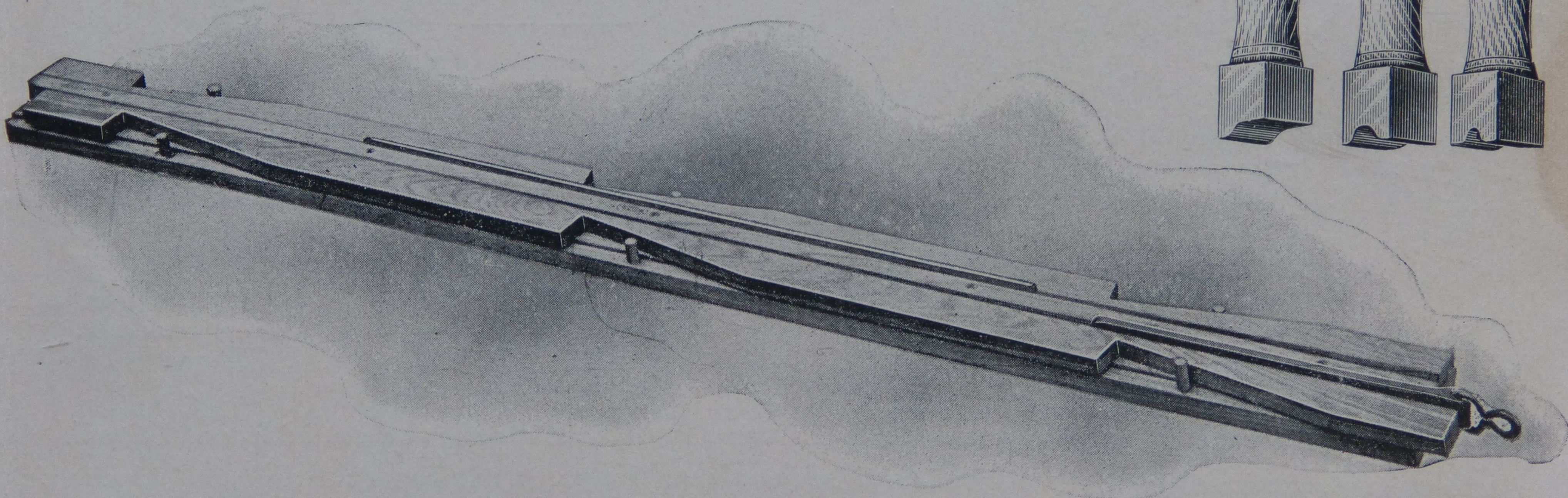
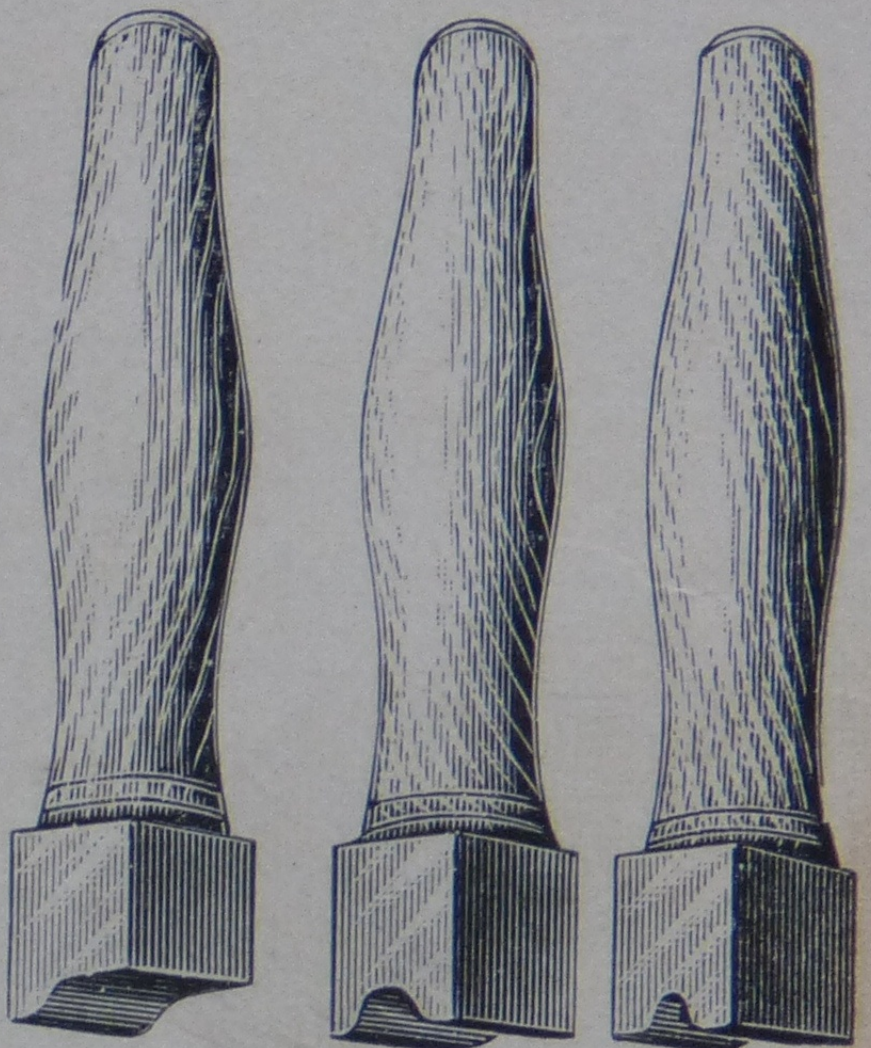
With the Oval Line Roll this is done very quickly, as the upper and lower half of the Line is raised ready for the filling by passing the straps through the Roll. The Rolls are made so that after the filling is inserted the upper and lower straps with the filling are passed through the Roll and set firmly together ready for stitching.

These Rolls are made some wider than the finished widths of the Line for stitching more easily on the Machine, and after sewing the Line is trimmed to the finished width desired. In ordering **give the finished width** of the Line.

1/2 or 5/8 inch width..... **\$5.00**
Oval line trimmers..... **3.50**

STRAP AND TRACE BURNISHING OUTFIT.

Our Strap and Trace Burnishing Outfit is a fine device for holding firmly any size Strap or Trace while it is being burnished or polished on the edges. The Iron can be heated, which saves time and produces a higher finish. With the Burnishing Holder we furnish three Burnishing Irons, see cut, one for light round edge Traces and Straps, one for heavy round edge Traces, and one for flat Traces, with curved edge on lower side\$4.00

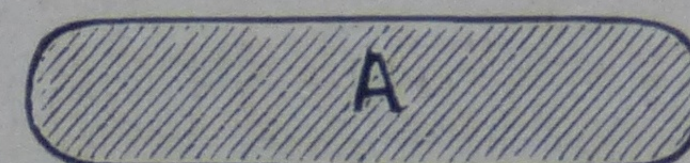
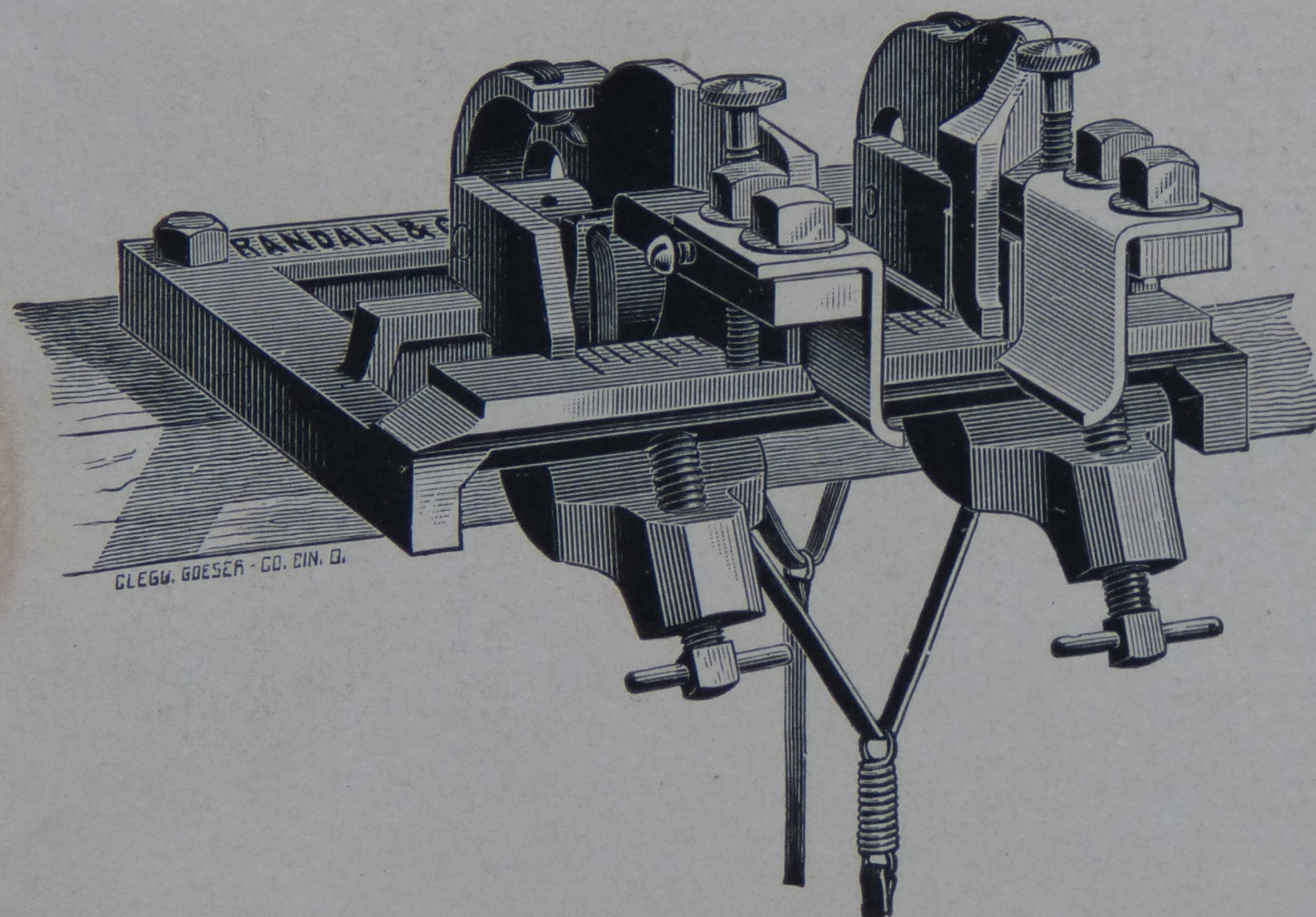


FILLER CUTTING MACHINE.

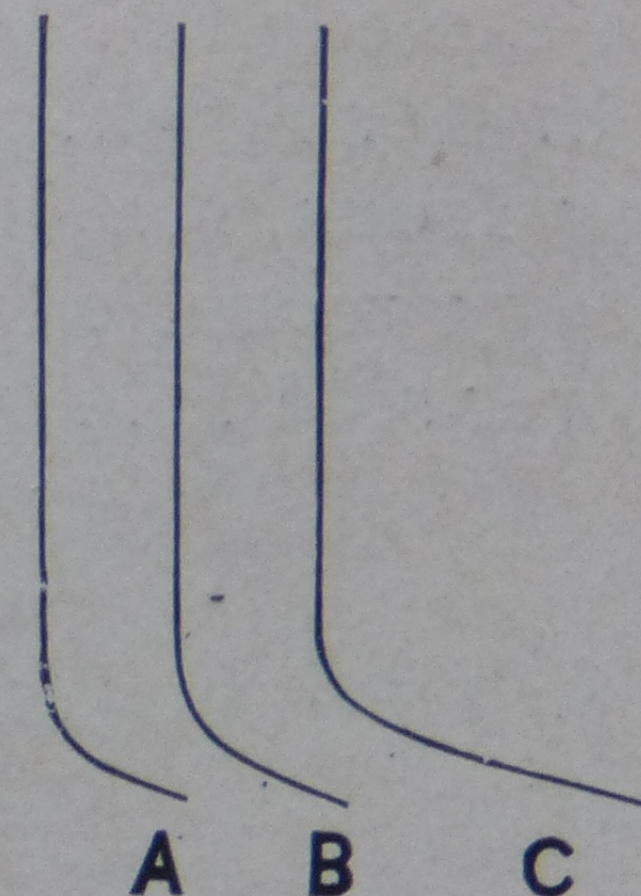
We make to order a machine for cutting or forming fillings for **bridle fronts**, etc., any size, oval or V shape.

Prices and complete information cheerfully given.

PATENT STRAP AND TRACE TRIMMER.



Two Traces can be trimmed like Style "A," and four Traces like Style "B" in one minute.



A—Single Straps and Traces.

B Traces only.

Style "A" Knife sent, unless otherwise ordered.

\$7.00

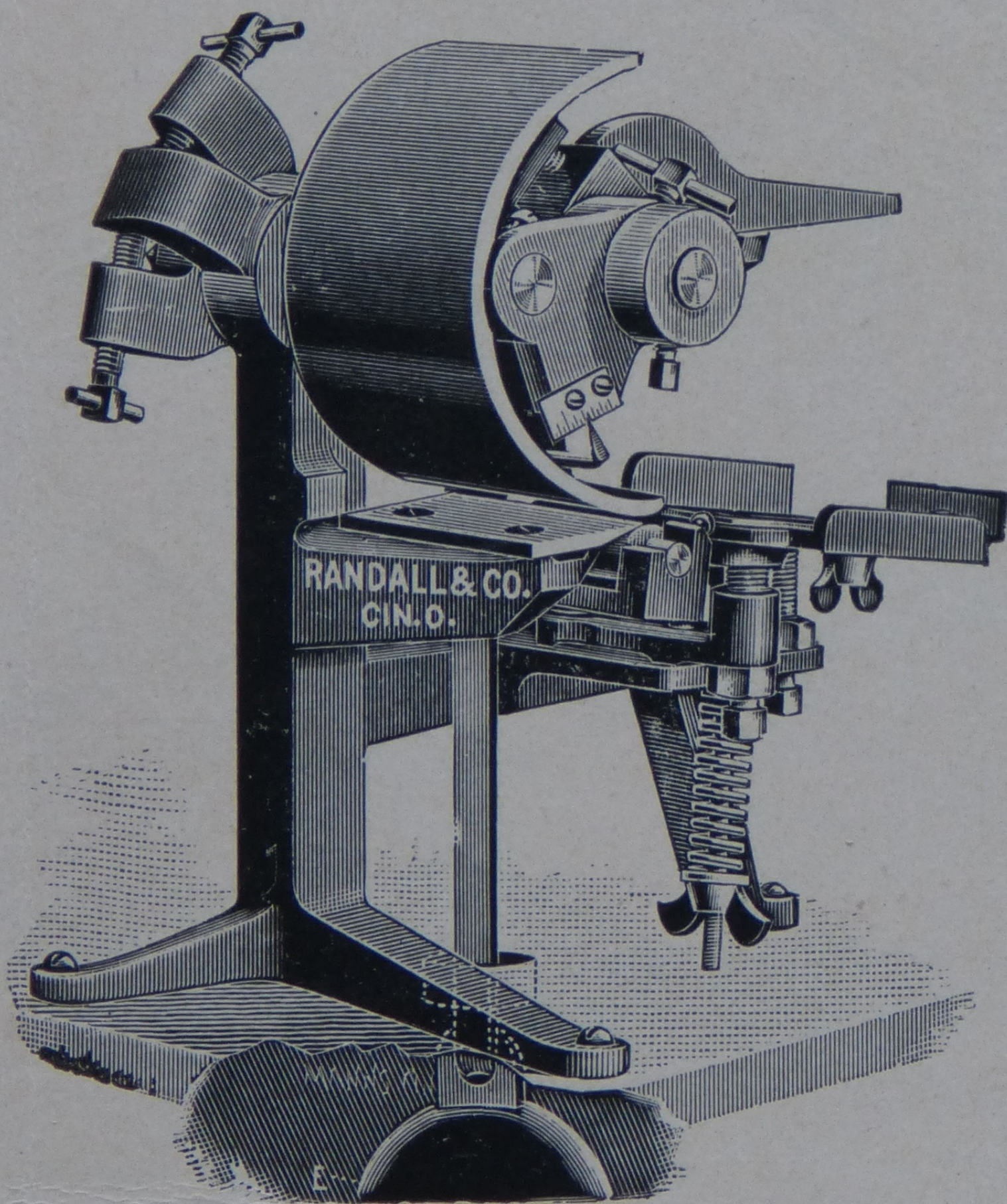
Extra Knives, A, B or C,
per pair, **\$2.50.**

After years of severe test our Strap and Trace Trimmer has proved itself to be a reliable tool. It will trim Traces and single Straps as good as it is possible to be done in any way. It trims work from $\frac{3}{8}$ to $\frac{3}{4}$ inch thick, and from $\frac{1}{2}$ to $2\frac{1}{2}$ inches wide. It is quickly set for the width desired. The knives are quickly adjusted for a light or heavy cut by the adjusting screws. For round-edge flat Lines and single-strap Harness, a boy can do more in one hour with this Machine than a man can do in three hours by hand. It is far superior to a hand-edge tool, and no shop can afford to be without one.

THE RANDALL SKIVER.

\$12.00.

Patented July, 1893.

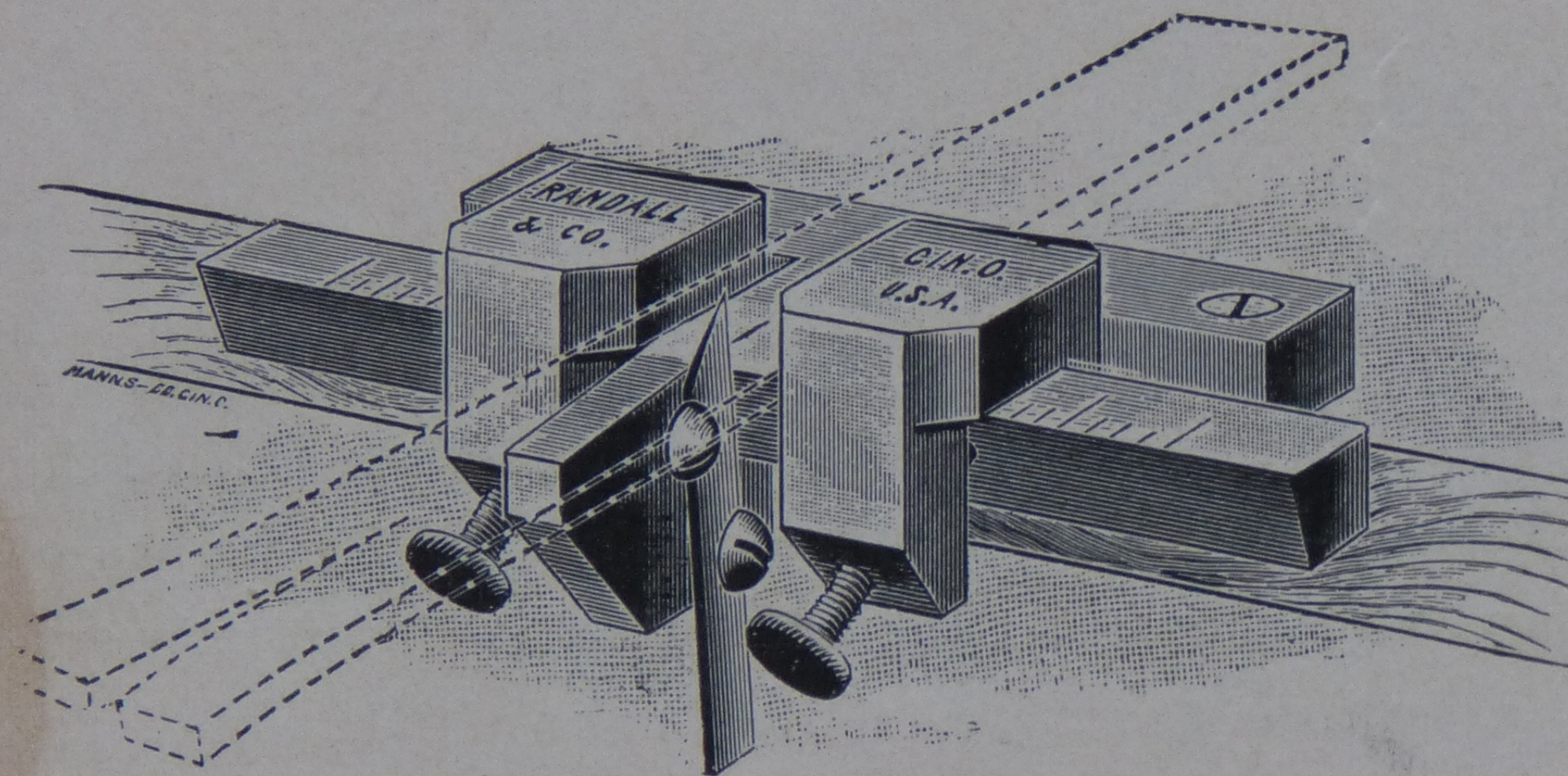


This is the only adjustable bevel Automatic Skiver offered the harness maker. This tool will skive from $\frac{3}{4}$ to $7\frac{1}{4}$ inches in length and up to 3 inches in width; and will skive uniformly and far more quickly than the round knife can in the hands of the most expert journeyman.

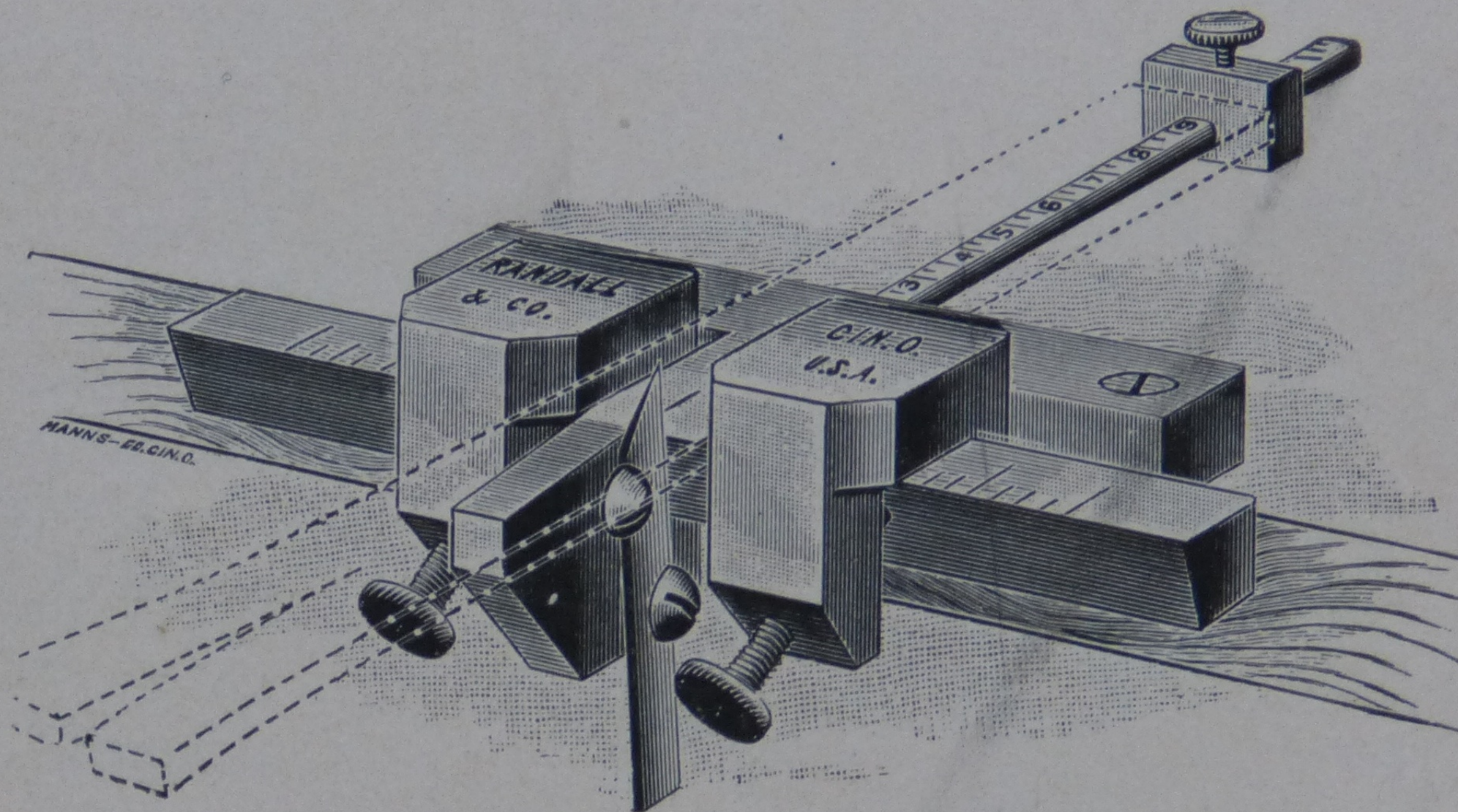
The degree and length of bevel can be changed quickly. The machine is worked automatically by each strap as it is skived, and it will skive a lot of work uniformly.

After adjustment for the bevel, the machine is operated thus: Pull lever "A" forward with the left hand; insert the strap with the right hand; let go of the lever, and then draw the strap out. The absence of a post on the near side renders it easy to adjust the machine, to observe its operation and to introduce work.

Strap Slitter No. 1.



Strap Slitter No. 2.



Our Strap Slitter is the best device ever made for slitting Crown Pieces, Turnbacks, Overchecks, Martin-gales, etc.

The knife is adjustable. Guides open $2\frac{1}{2}$ inches.

Will slit straps in the center $\frac{1}{2} \times \frac{1}{2}$, etc., or can be set to slit $\frac{1}{2} \times \frac{5}{8}$, or any other combination of widths desired.

A great number of these tools are in daily use. They save much time, as the strap can be slit the length desired in the time formerly consumed in marking off the length of the slit to be made with a draw gauge.

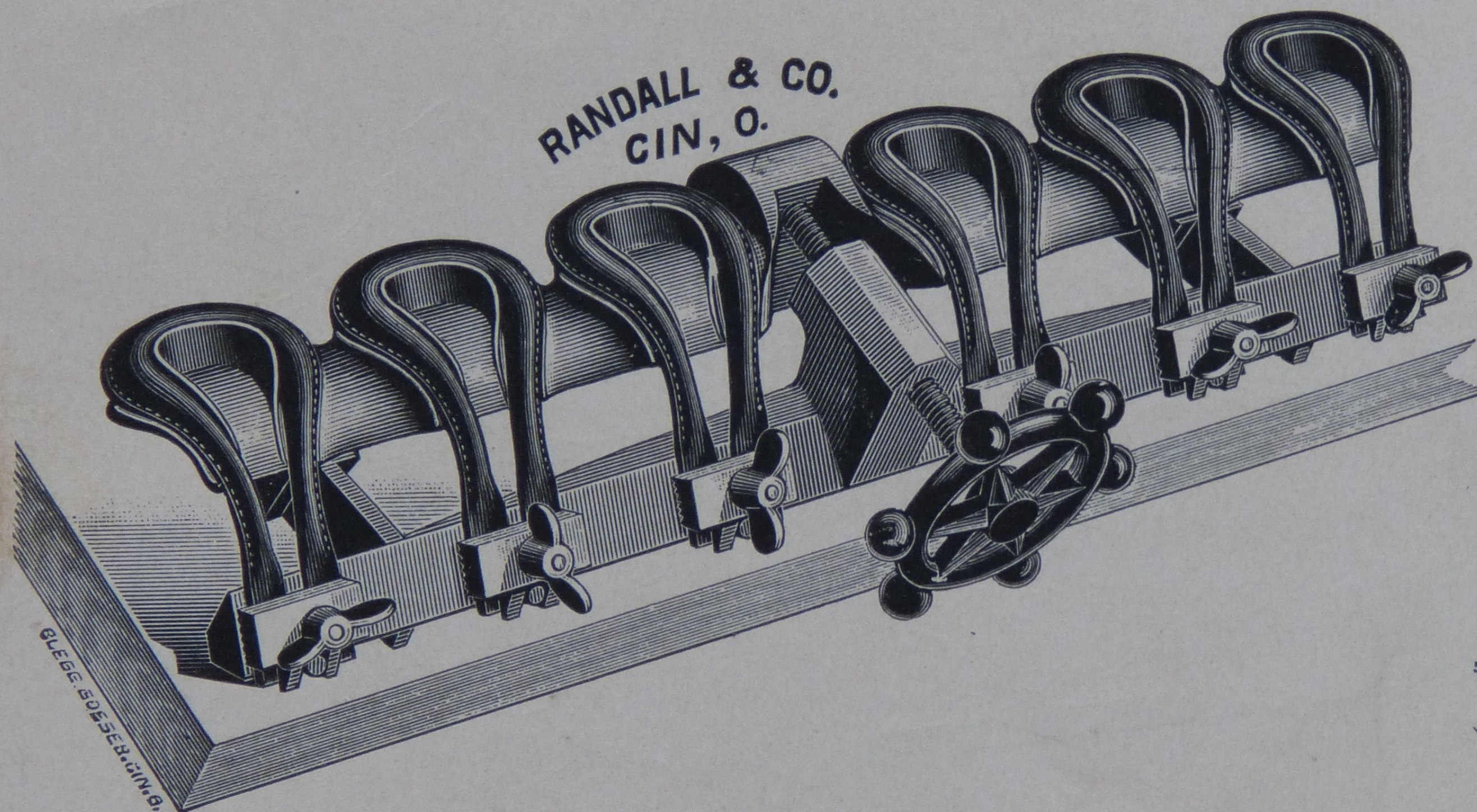
Every factory should have several of these tools, and piece workers can save their cost in a very few days.

Strap Slitter No. 2 is made with a gauge rule attachment, which can be set for the desired length of slit in Crown Pieces, Turnbacks, etc. This is a very valuable attachment, and we recommend it highly.

Strap Slitter No. 1, without the gauge rule attachment..... **\$1.15**

“ “ “ 2, with the gauge rule attachment..... **1.50**

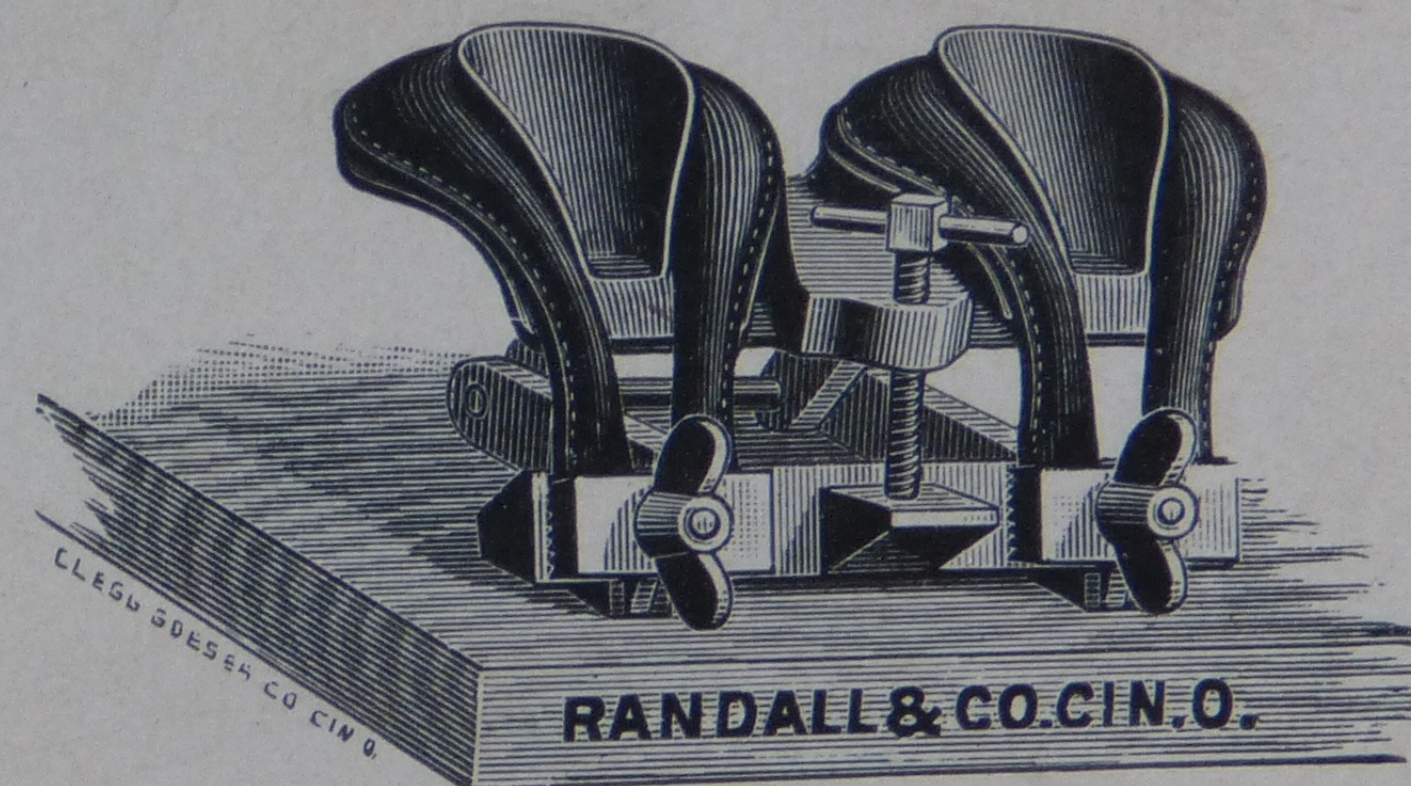
Rapid Crupper Former.



\$7.00

Strong, Quick Action, Perfect and Uniform
Shape, Tightens and Stretches six Cruppers by one Screw
Patented November 18, 1890.

Double Crupper Former.

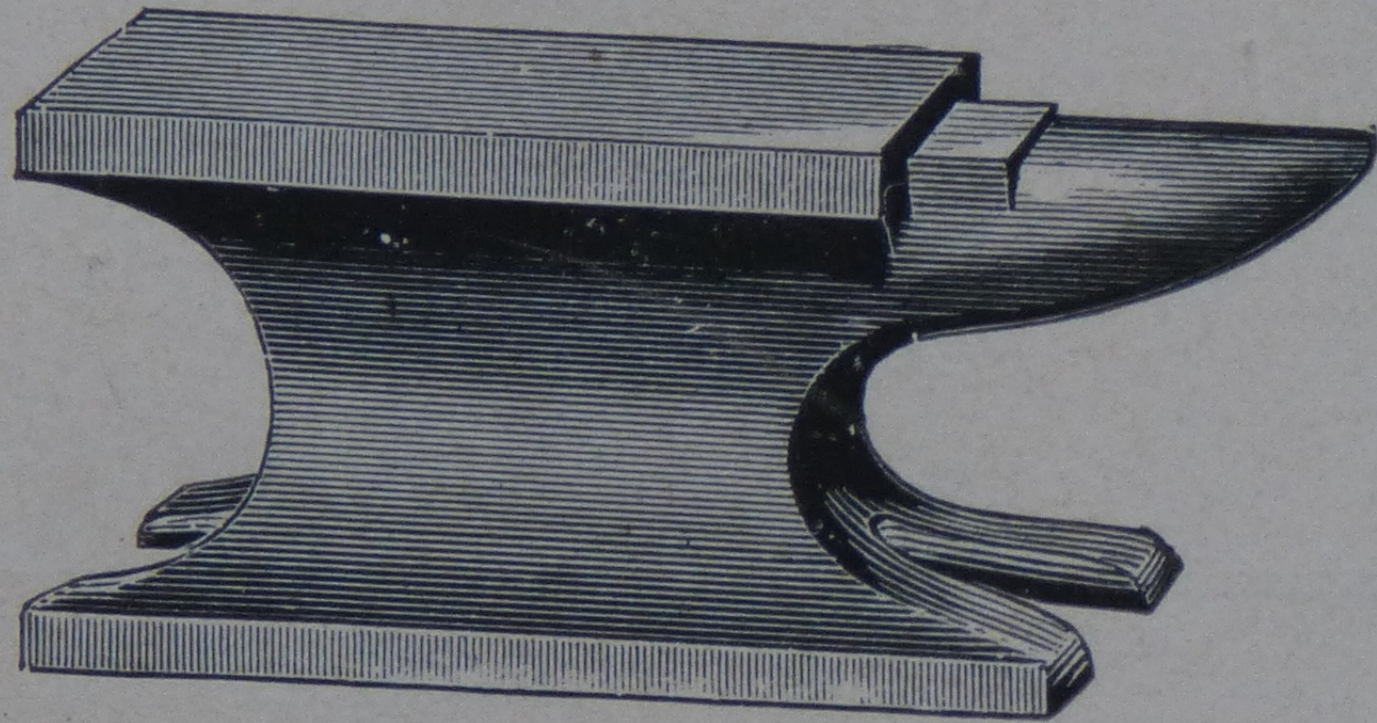


Strong, Quick Action, Perfect and
Uniform Shape, Tightens and Stretches
two Cruppers by one Screw.

\$2.50

Patented November 18, 1890.

BENCH ANVIL.



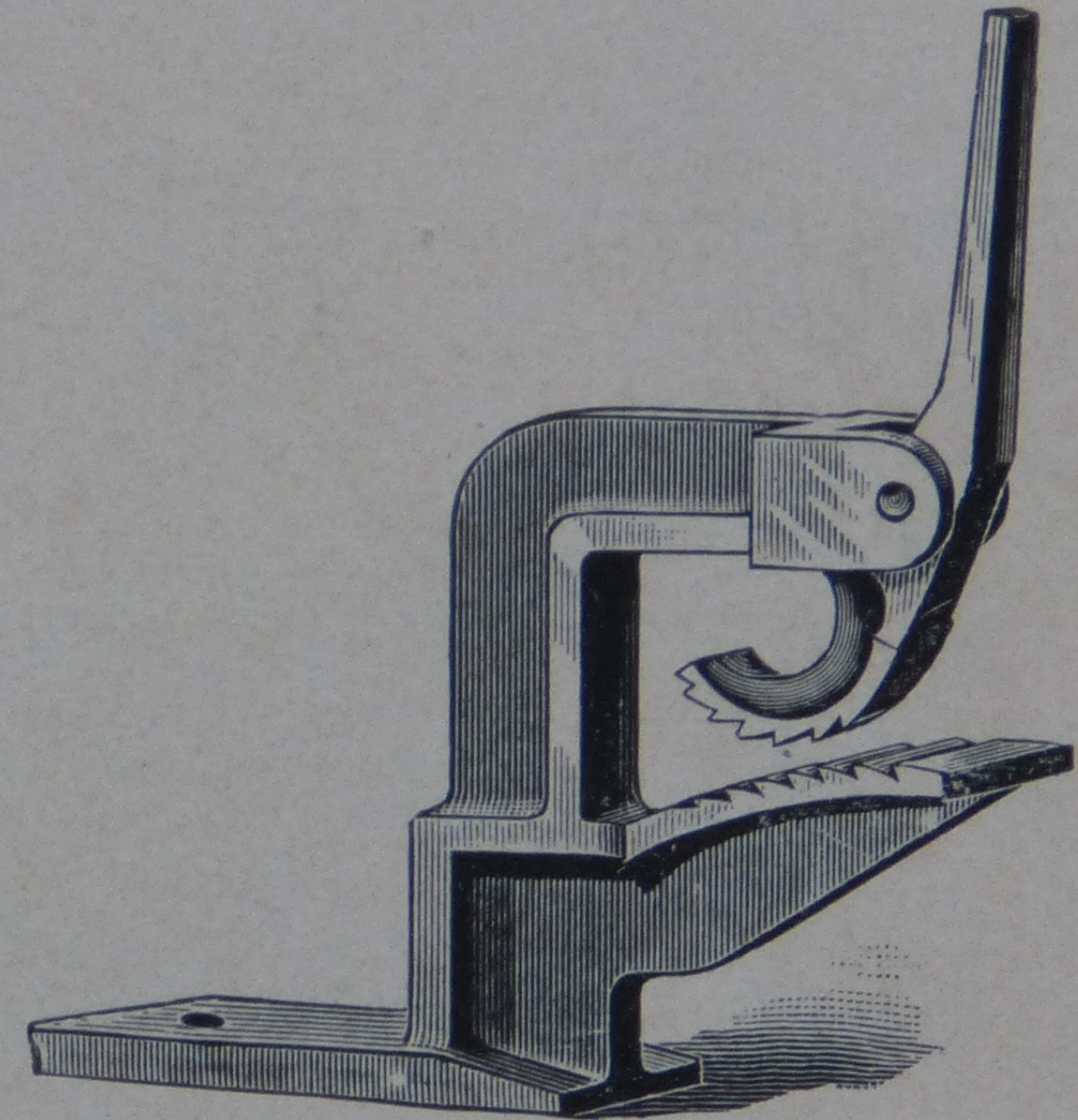
Face, 3 x 6 inches. Chilled and polished.
Weight, 12 pounds.

Price, each.....**\$1.00**

This is a very useful tool around a Harness
Factory.

STRAP HOLDER.

40c.



This is a handy tool for holding straps, as
they are rubbed and polished. Can not injure
the strap.

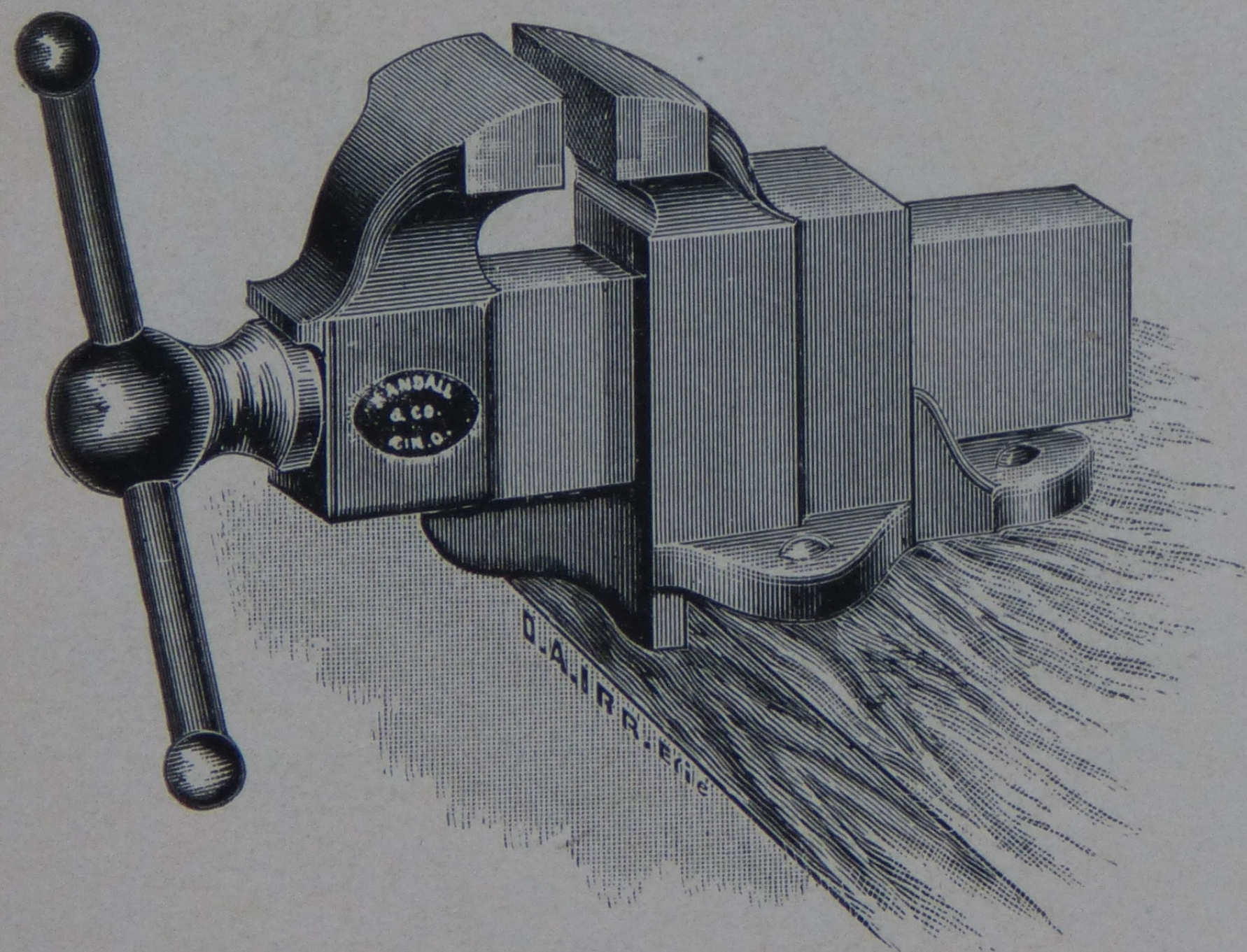
HARNESS MAKER'S VISES.

STATIONARY BASE.

Extra Strength.

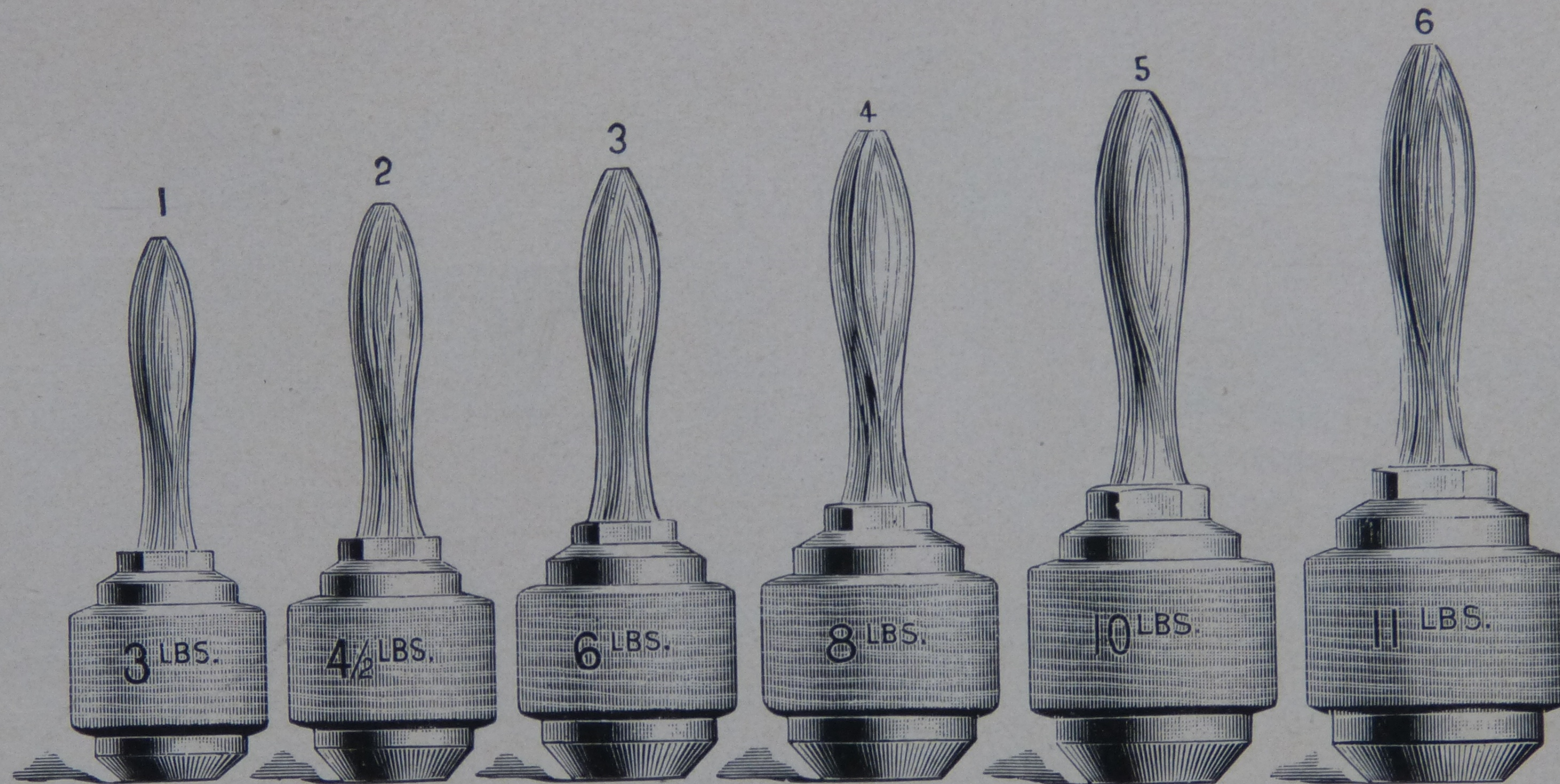
Steel Jaws.

Well Finished.



No.	With Jaw	Opens	Weight	Price
1	2½ inches	3½ inches	12 lbs.	\$3.75
2	3⅛ inches	4 inches	20 lbs.	4.50
3	3½ inches	5 inches	30 lbs.	5.25
4	4 inches	6 inches	45 lbs.	6.00

RAWHIDE MALLET.



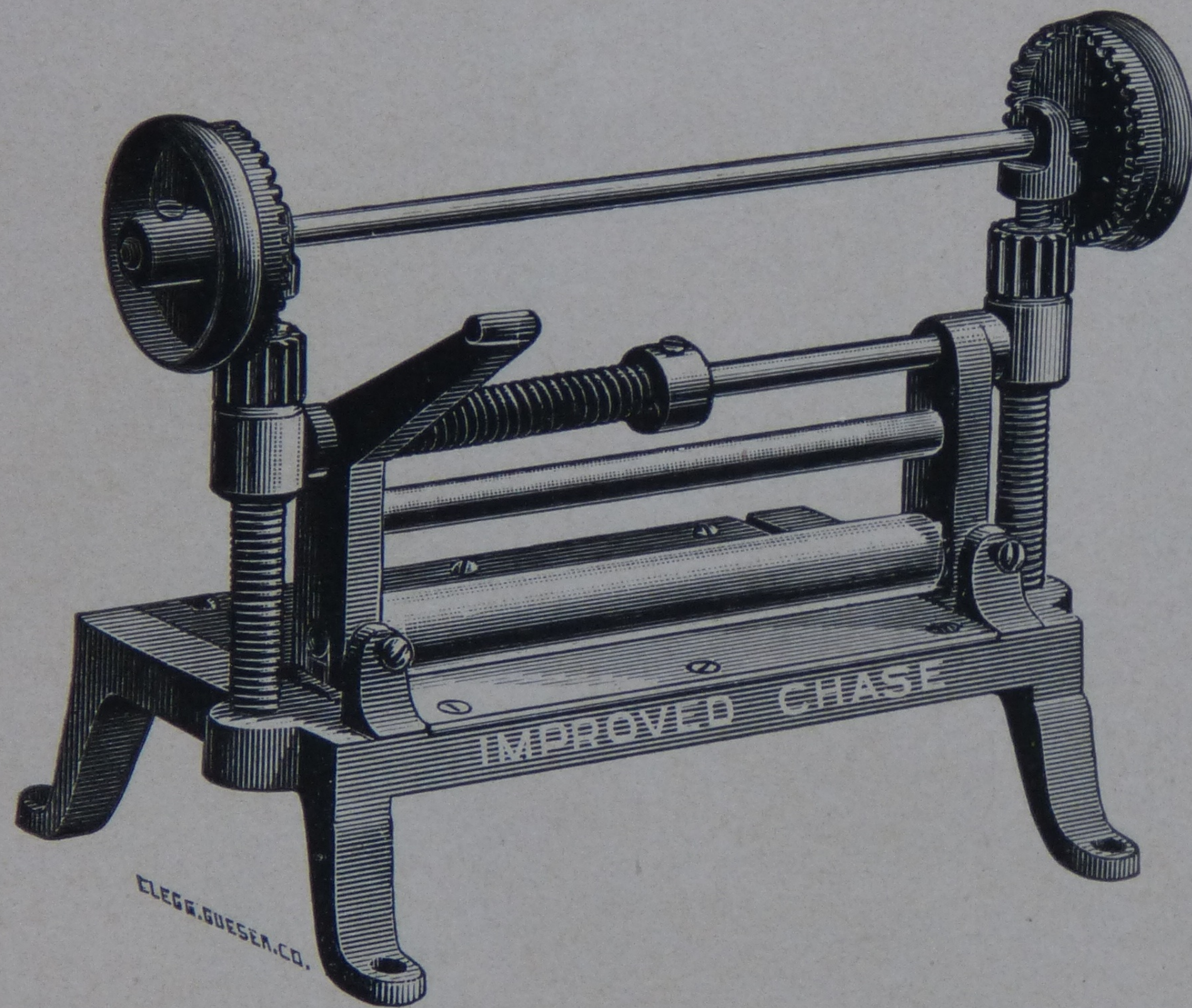
No. 1..... **\$1.60**
 No. 2 **2.00**
 No. 3 **2.25**

No. 4..... **\$2.50**
 No. 5 **2.75**
 No. 6 .. . **3.00**

Any weight, 3 to 12 lbs.

Strong, well made, and filled with selected stock.

IMPROVED CHASE SPLITTING MACHINE.

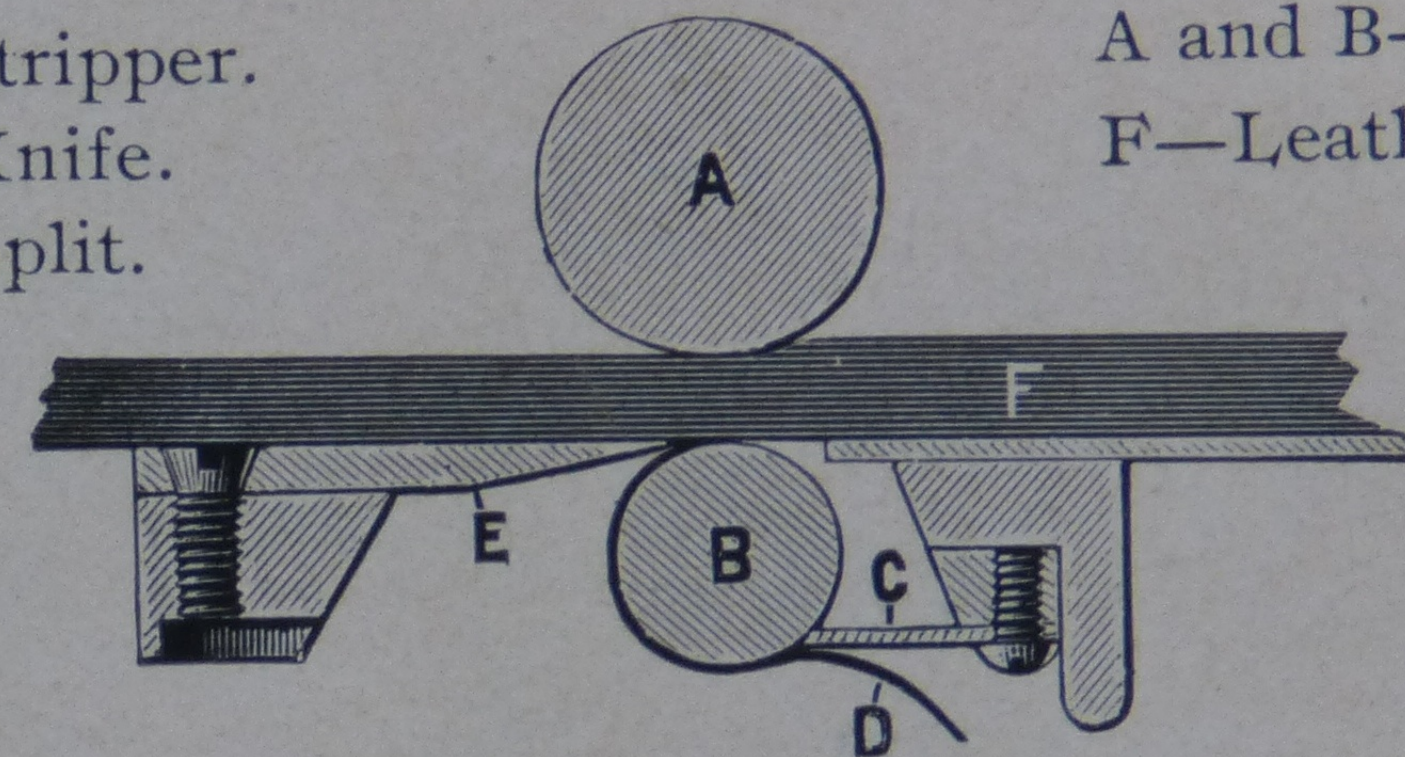


8-inch	\$5.50
10-inch	6.50
Extra Blades, 8-inch	1.00
“ “ 10-inch	1.25

(Will fit the old Chase Pattern Splitters.)

C—Stripper.
E—Knife.
D—Split.

A and B—Rolls.
F—Leather.



The split is turned from the lower roll, and kept from wrapping around it by the Stripper “C.”

With the addition of the Stripper, shown by the small cut, the Improved Chase is the **best Double Roll Splitter made**, and our **prices are the lowest** for this type of machine.

Parties buying the Improved Chase Splitter will find them satisfactory.

We insure buyers as to the quality of the machine, and especially the knife.

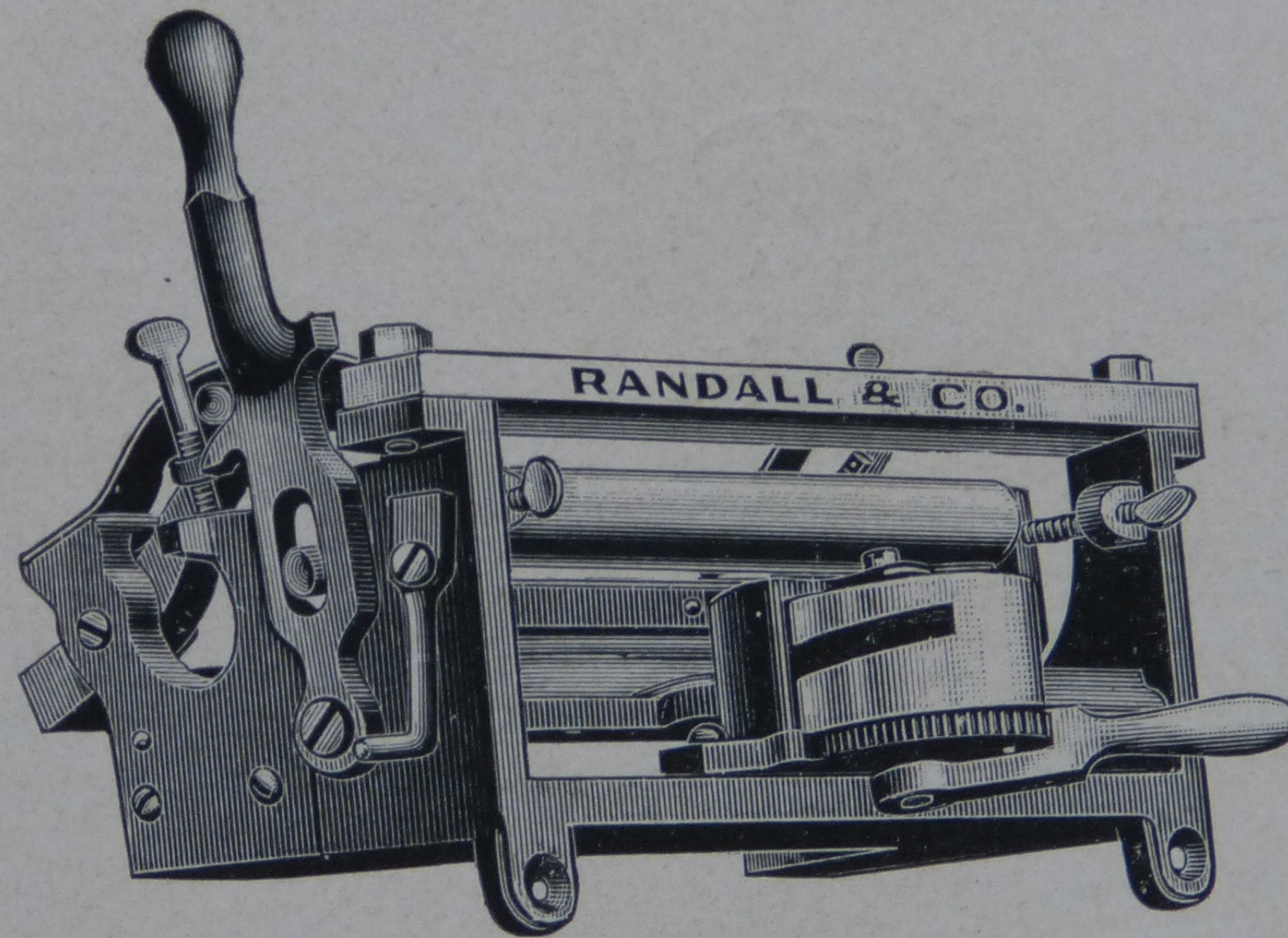
KREBS SPLITTING MACHINE.

This machine has features found in no other machine. Has been made nearly twenty years and is known to the trade.

Special Features.

Cam and lever gauges the lower roll.

A dial index duplicates thickness.



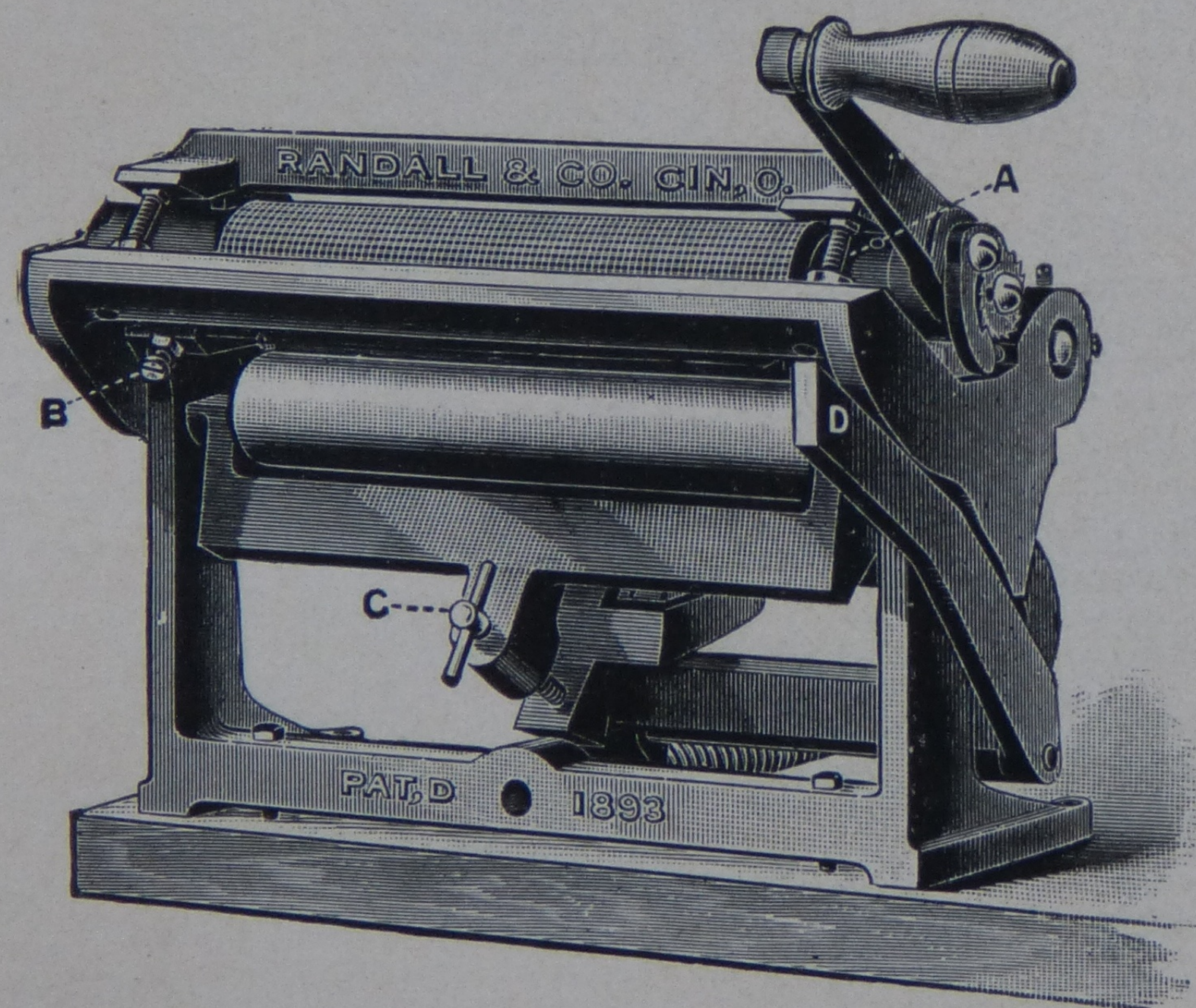
10-Inch

\$10.50

By moving the cam lever as the stock is drawn through stock can be nicely skived. An upper spring roll prevents gouging.

CRANK SPLITTING MACHINE.

Patented 1893.



No. 3. 10-inch knife **\$15.00**

They are the *best* Splitters for their capacity made.

SIMPLE—RELIABLE—STRONG.

The leather may be *drawn* through by the hand, or *forced* through by the *crank* from the back to the front of the machine.

The *lower roll* may be *dropped* $\frac{3}{4}$ inch by lever D, allowing the stock to be inserted from the front.

Any *pressure* desired may be given by the pressure screw C and spring.

Small pieces for loops, etc., or any common stock for Blinds, Pads, etc., can be split without stretching.

Will split a piece of leather $\frac{1}{4}$ inch or more thick and 10 inches wide, in the middle or as light a cut as tissue paper. The Splitter for folds.

The crank does not turn unless desired.

TRY A MODERN SPLITTER.

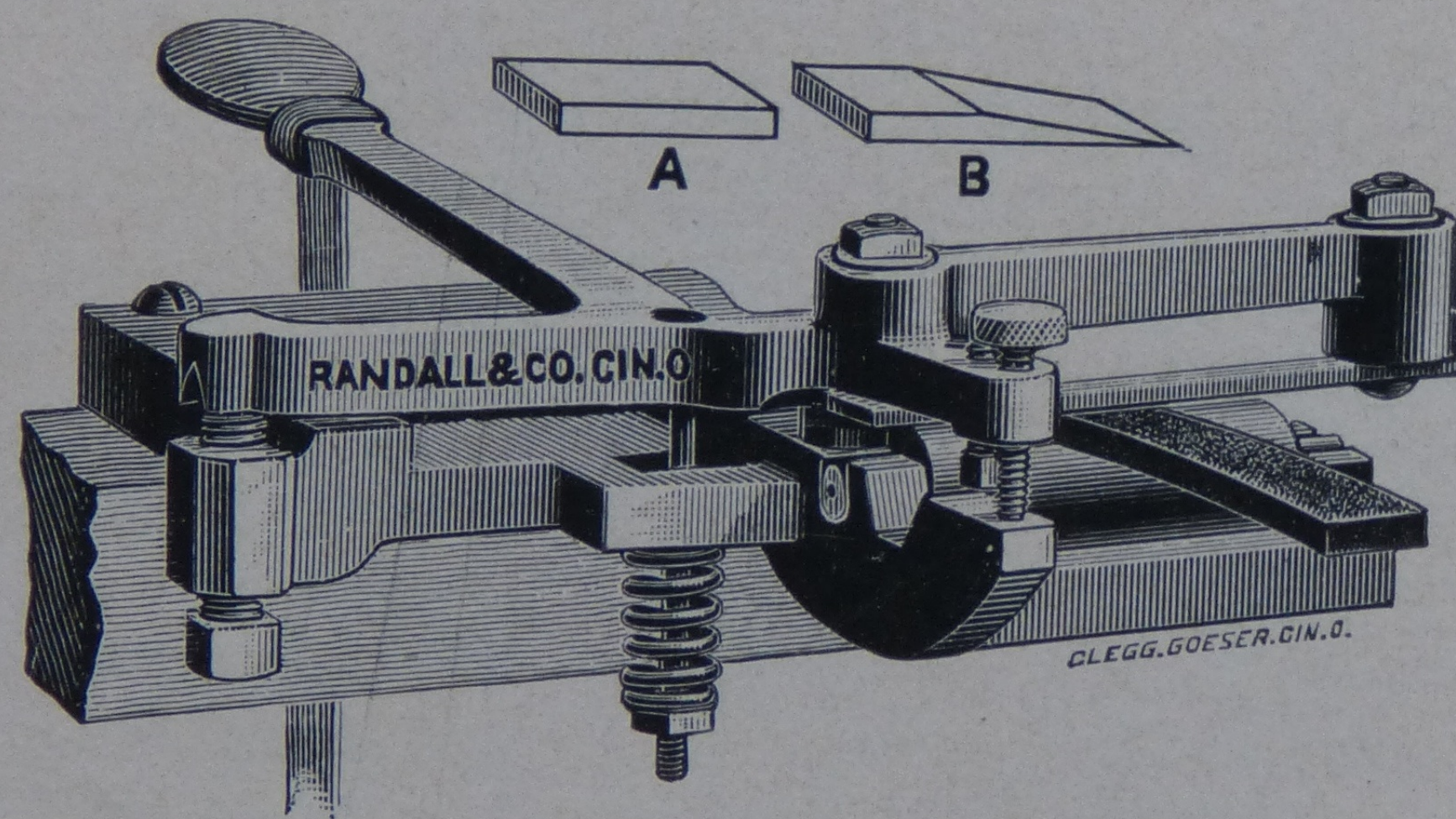
Save stock, save time, and it will soon pay for itself.

Patent 3-inch Splitting Machine.

Patented 1888.

SPLITS.

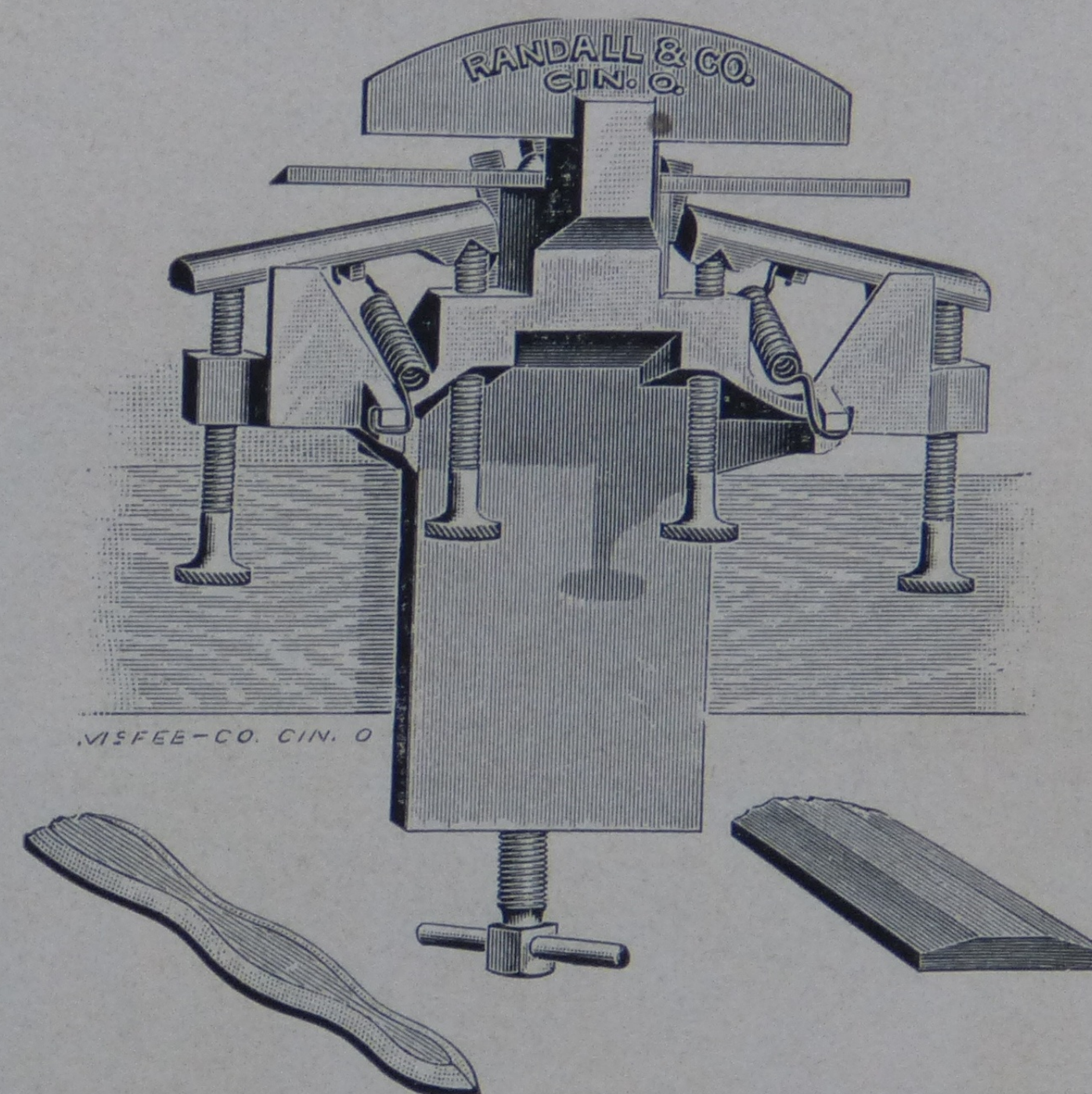
SKIVES.



This is a very simple, good machine. Up to its capacity it will split as well as any single Roll Splitter made. It is quick in its action. The knife is raised by pressure on the lever, and the work is admitted from the side. With a little practice, by the gradual drop of the lever, as the strap is drawn through, very good skiving can be done by this machine.

At the price — **\$2.25**, it is the cheapest Splitter made.

Beveling Machine.



Easily fastened to the bench by clamping screw.
This machine bevels straight and waved work.
Can cut any bevel, and edge thickness end to end of the strap.
Saves one-half time over edge tools.

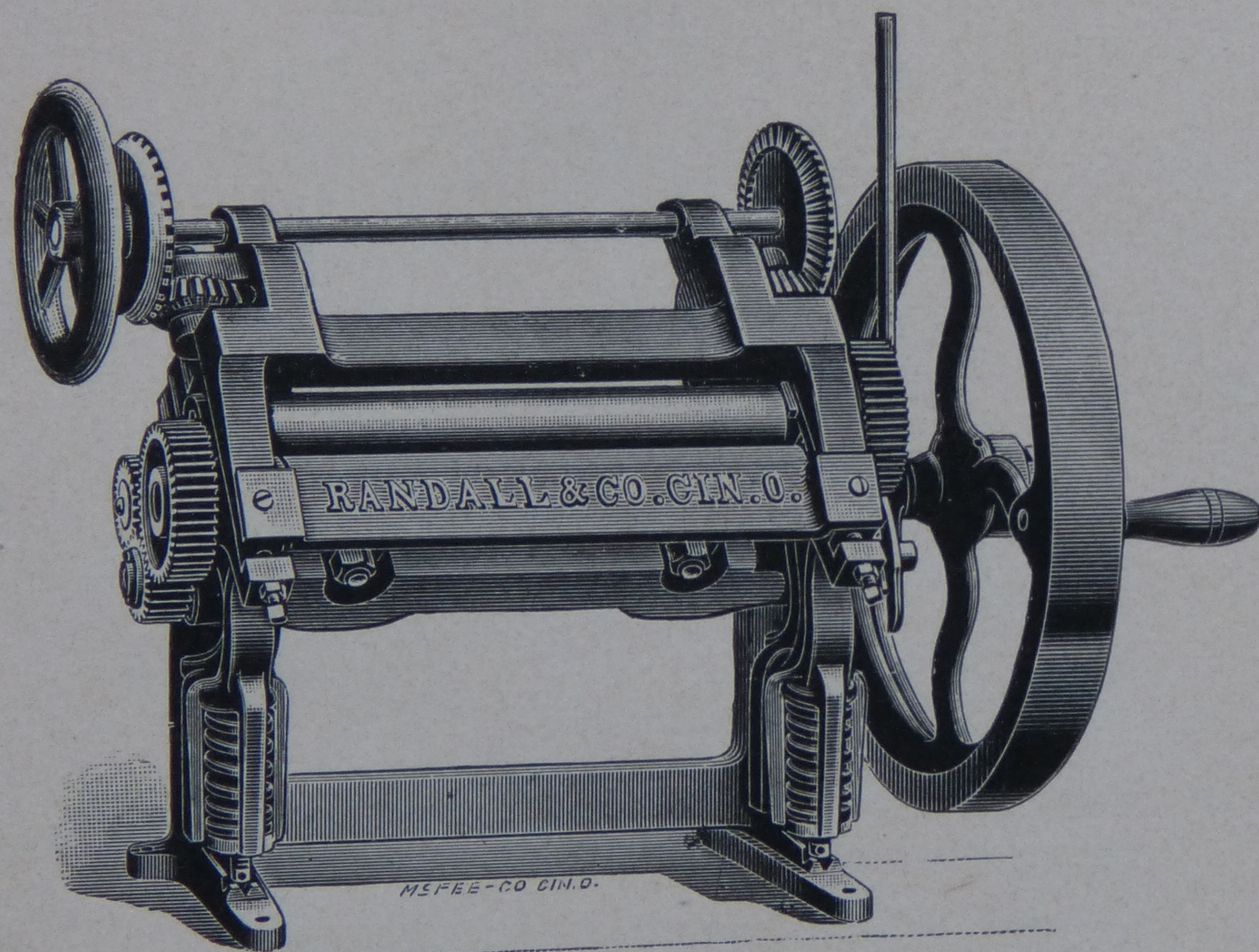
PRACTICAL—RELIABLE.

\$3.00

RANDALL SPLITTER NO. 1. Hand or Power.

• Patented 1892.

12-INCH KNIFE.



The Nos. 1 and 2 Feed Roll Splitters will do all the splitting required by the Harness and Saddle Maker in a manner unsurpassed. The frames are cast in *one* piece, and are *very strong and stiff*. They have Cut Gears and Fluted Feed Rolls. The momentum of the flywheel renders their operation easy, steady and rapid. To drive the machines by power, belt to the flywheel, which always revolves, and start and stop the rolls by the shifting lever. The handle is easily removed. The *knives* are strong and of the *best quality*. All the adjusting screws are very accessible, and the knife can be easily removed. In designing these machines we have endeavored to excel in efficiency and convenience, and have produced first-class machines.

Diameter of Pulley Flywheel, 16 inches.

Speed, 175 revolutions per minute.

No. 1 Splitter **.\$35.00**

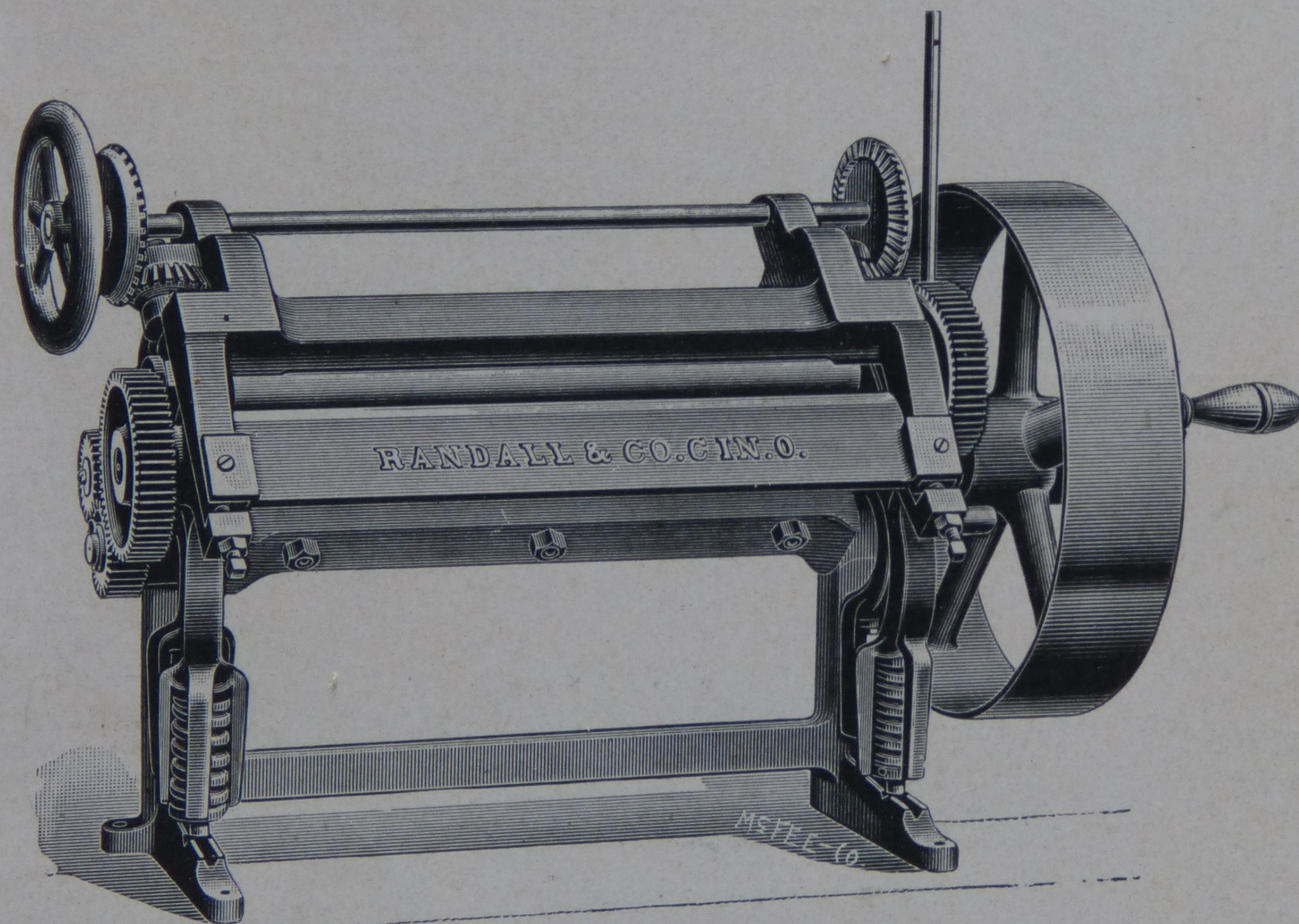
LOWEST PRICE.

FIRST QUALITY.

RANDALL SPLITTER NO. 2. Hand or Power.

Patented 1892.

18-INCH KNIFE.



Frame cast in one piece.

Fluted Feed Rolls.

Machine-Cut Gears.

All-Steel Knife.

Easily adjusted.

All parts accessible.

Quick acting Shifter attachment.

Speed, 175 revolutions.

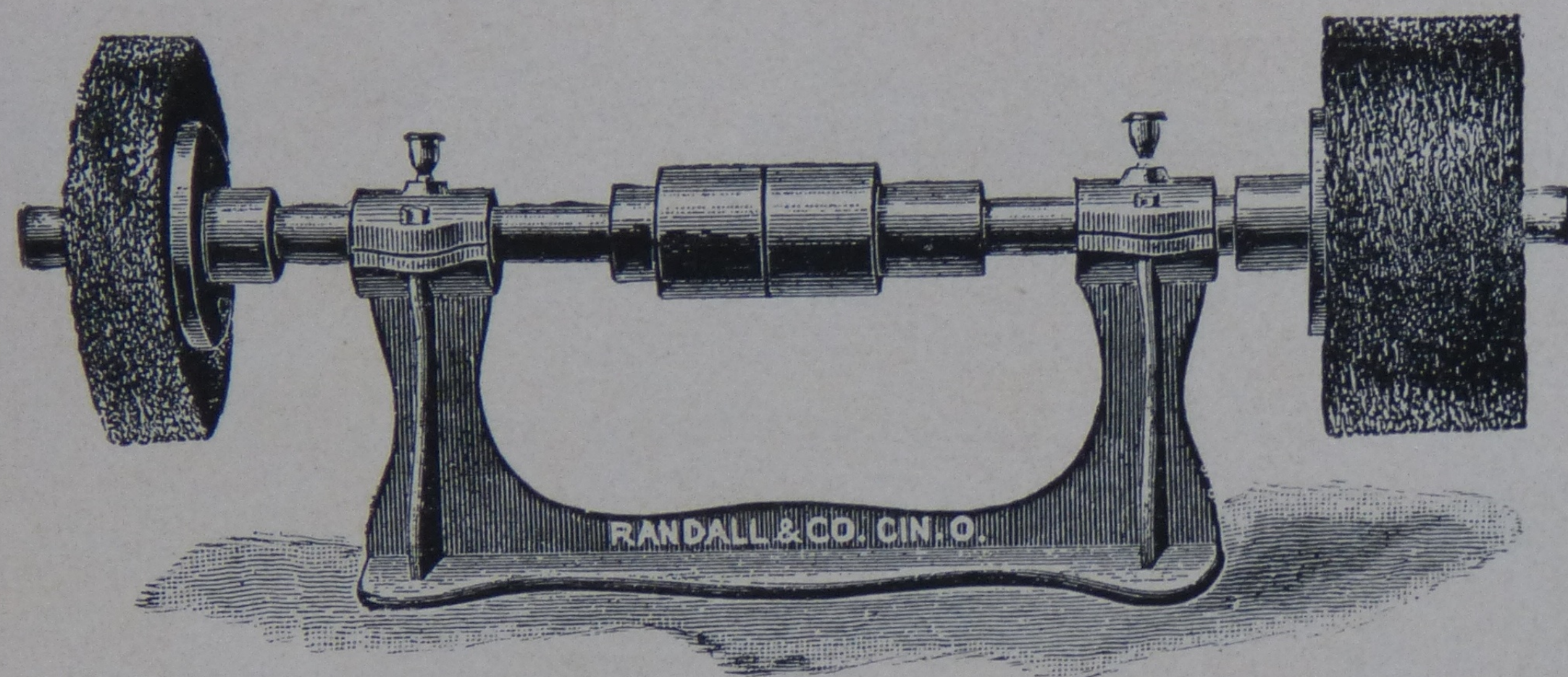
Diameter Pulley, 16 inches.

No. 2 Splitter, 18-inch Knife... **\$55.00**

LOWEST PRICE.

FIRST QUALITY.

POWER BRUSH SHAFT.



For Cleaning and Polishing Saddles, Horse Collars, etc. Speed, 800.

T. & L. Pulley, 2 x 3 inches.

Shaft, without brushes **\$7.00**

Brushes (either cloth or bristle),
2-inch face by 10 inches diameter. **3.50**

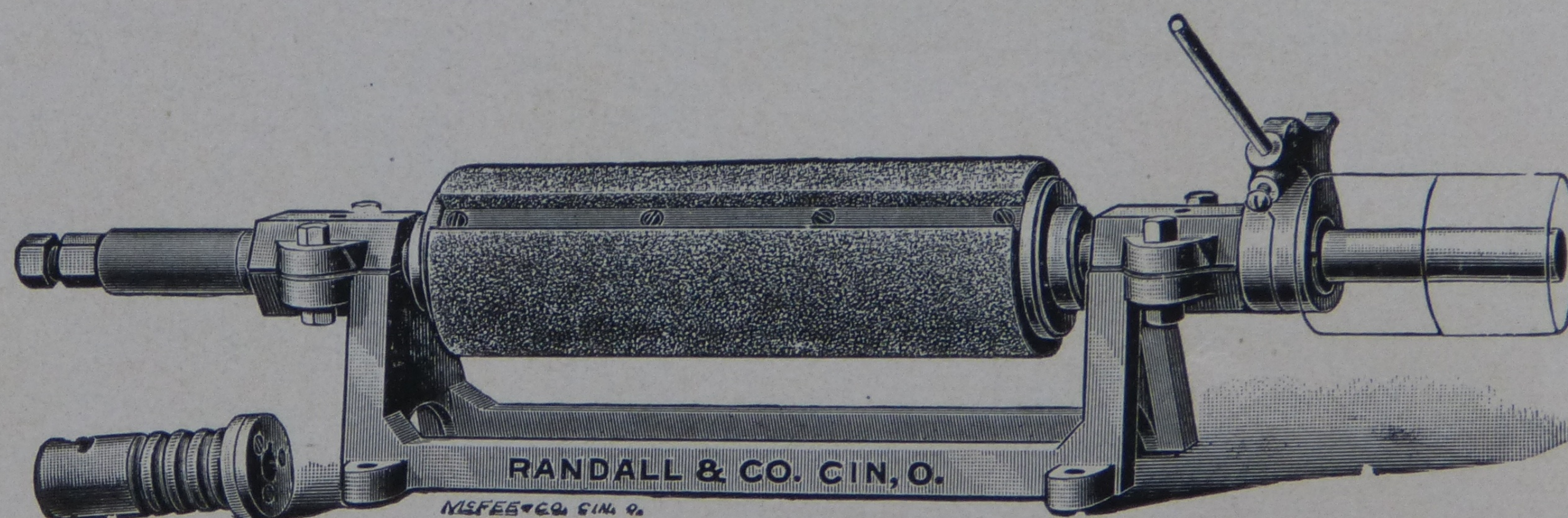
Brushes (either cloth or bristle),
4-inch face by 10 inches diameter. **4.50**

SANDER AND BUFFER.

This is a valuable machine for smoothing the edges of Blinds, Hame Tugs, etc. The main roll is made so that ordinary sized sheets of sand-paper can be used.

The end shaft is used for sanding and finishing the small circle of Concord Blinds.

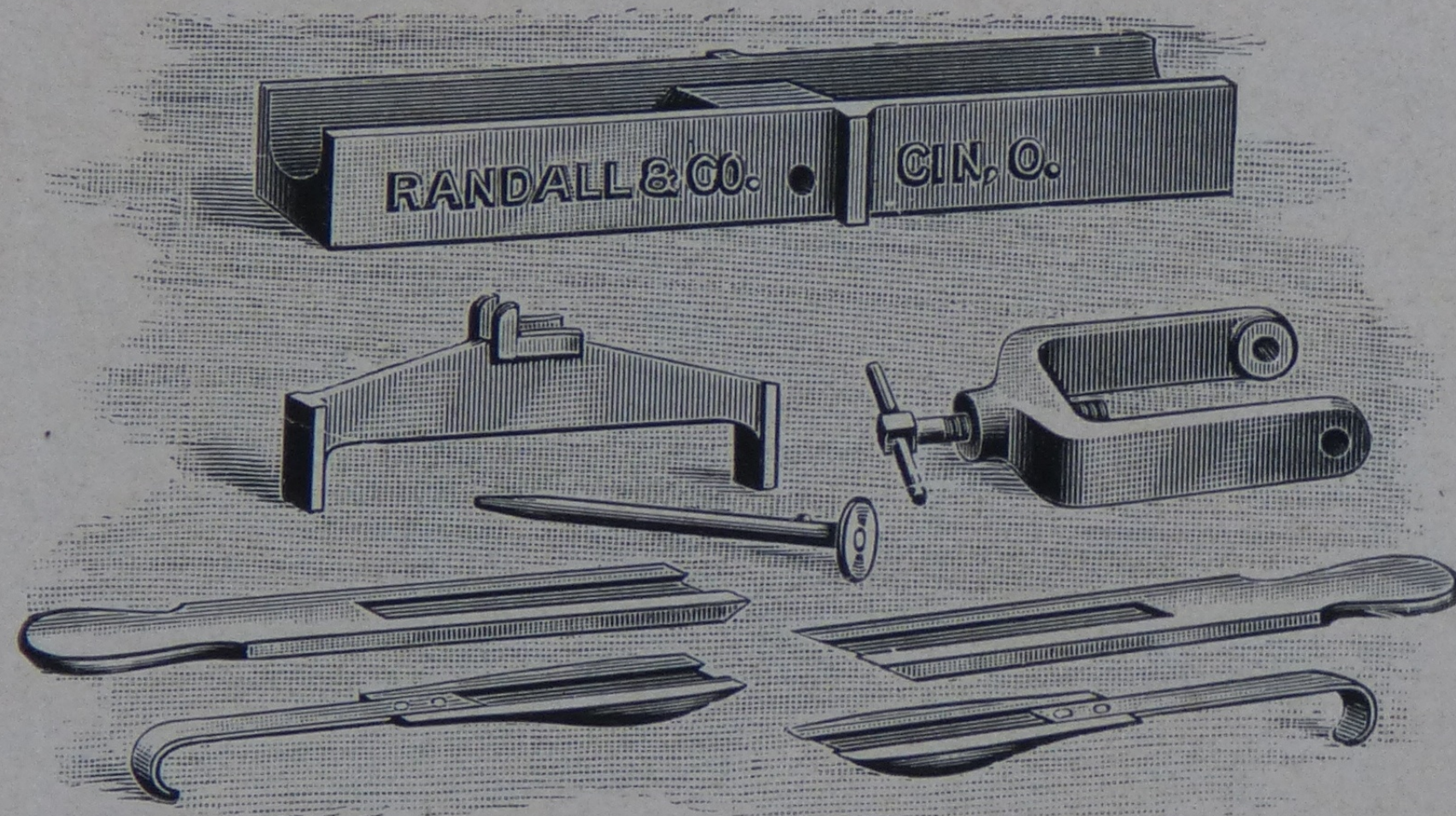
This produces blind finished in best possible manner.



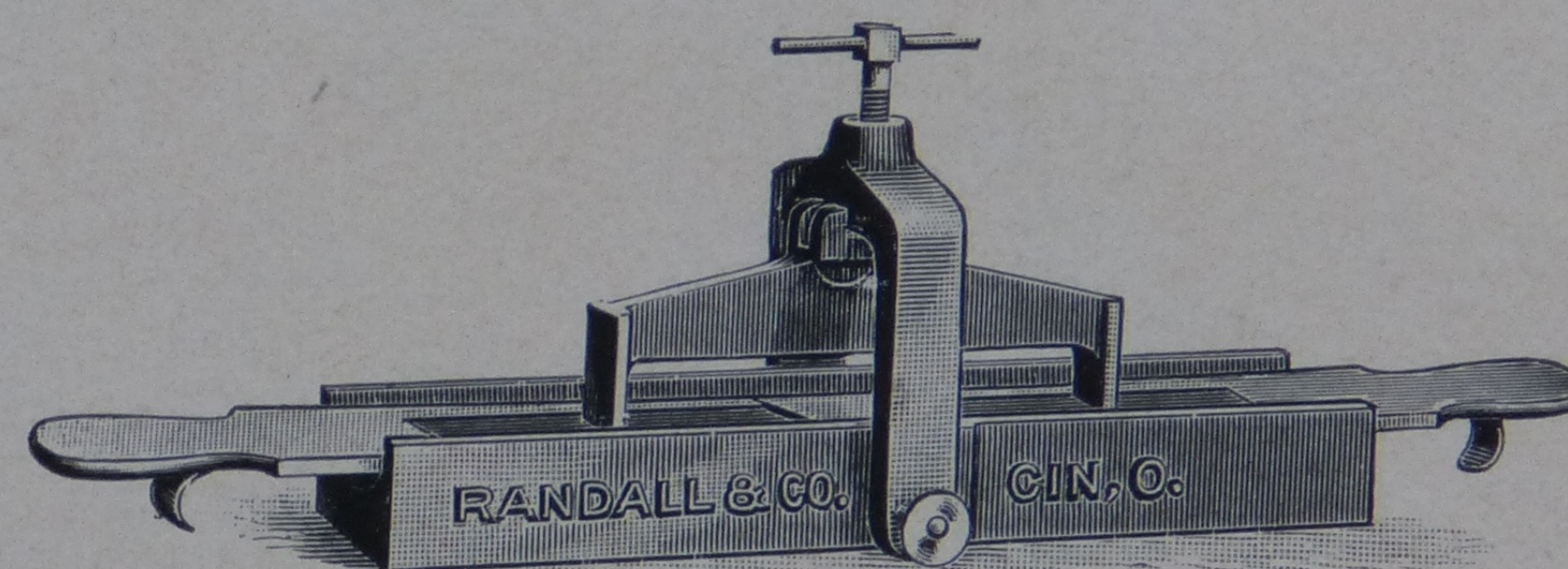
Speed, 800.

Price, **\$20.00**

TEAM PAD BOX.



READY FOR TACKING.

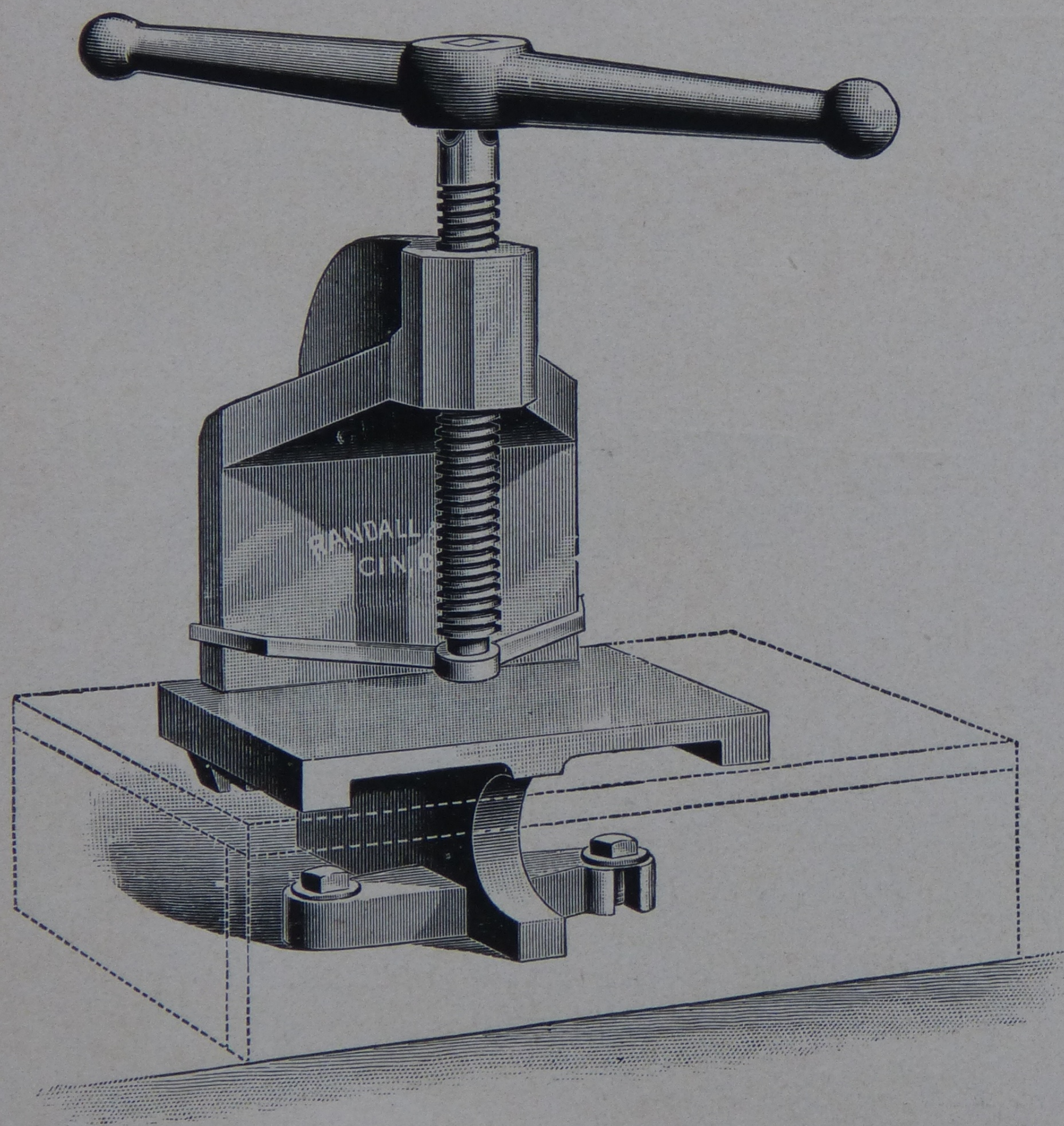


The cuts show all the parts that make up our Team Pad Box. The Pads are easily placed in the box, the forms put in, and all held firmly while the pad is tacked up, and the inside plates are easily removed. Width of box, $2\frac{1}{4}$ inches.

Price, \$5.00

No. 1 HARNESS PRESS.

100 Pounds.



The **traveler** at the end of the screw is a steel casting made and attached to the screw so that the twisting pressure of the screw is upon the steel casting, which prevents any twisting or displacing of the loop die while the loop is being pressed.

It is a very valuable feature in the No. 1 and No. 2 Presses.

The table shown in the cut by dotted lines, may be built around the base of any of our presses, for the easy handling of loop-boxes.

Screw, $1\frac{1}{4}$ inches diameter. Table, 9 x 7 inches. Greatest space under screw, 7 inches.

No. 1—100 lbs., \$10.00

No. 2 HARNESS PRESS.

200 Pounds.

This Press, with our Combination Loop Box, is the best medium priced Loop making outfit made.

We recommend this and the No. 3 Press highly.

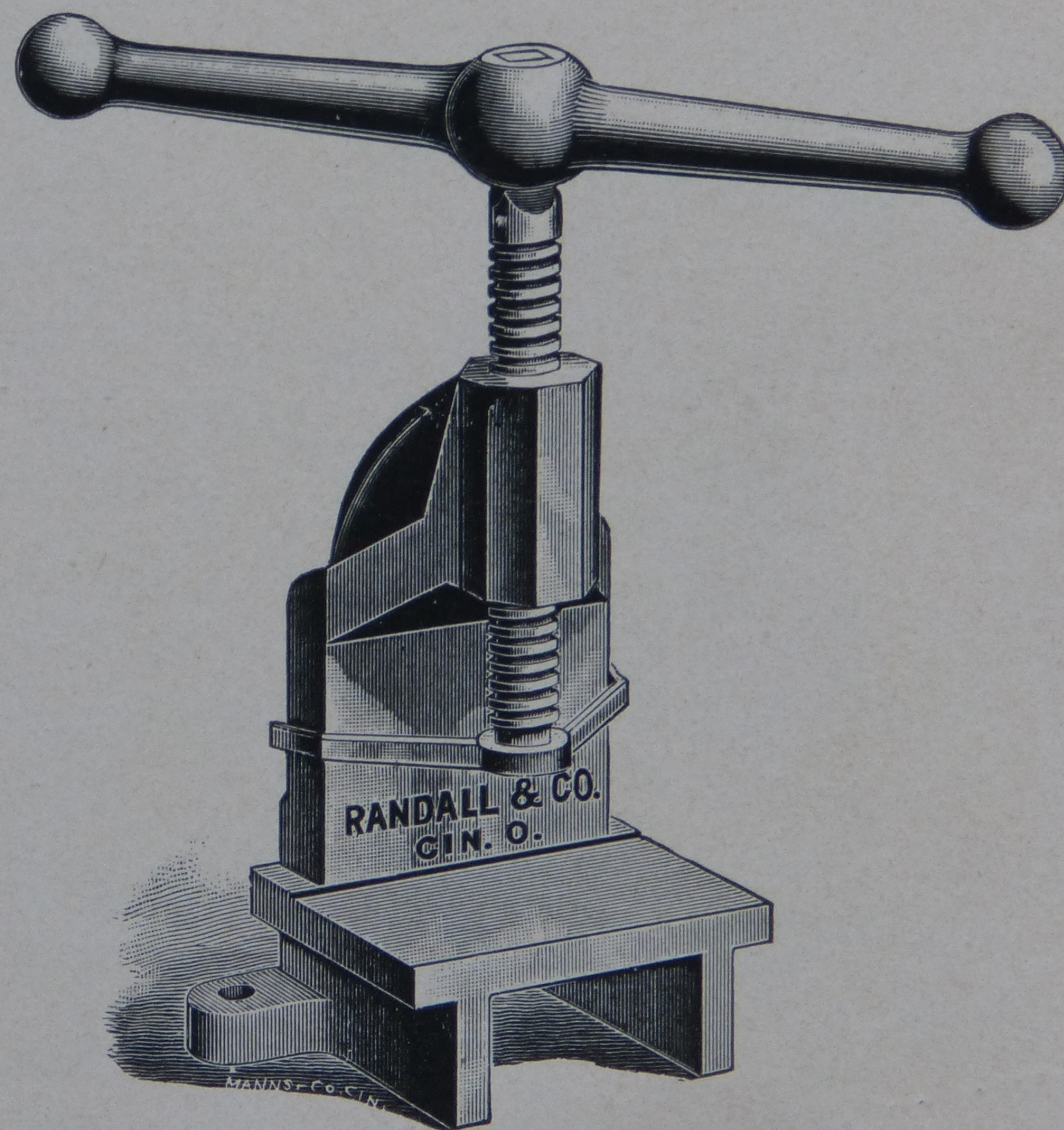
Diameter of screw, $1\frac{5}{8}$ in.

Length of lever, 31 in.

Table, 10 x 6 in.

Greatest space under screw, 9 in.

No. 2 Harness Press.....**\$18.00**



No. 3 AND 3½ HARNESS PRESSES.

Pressure Bar. 225 and 300 Pounds.

A VERY SUPERIOR PRESS.

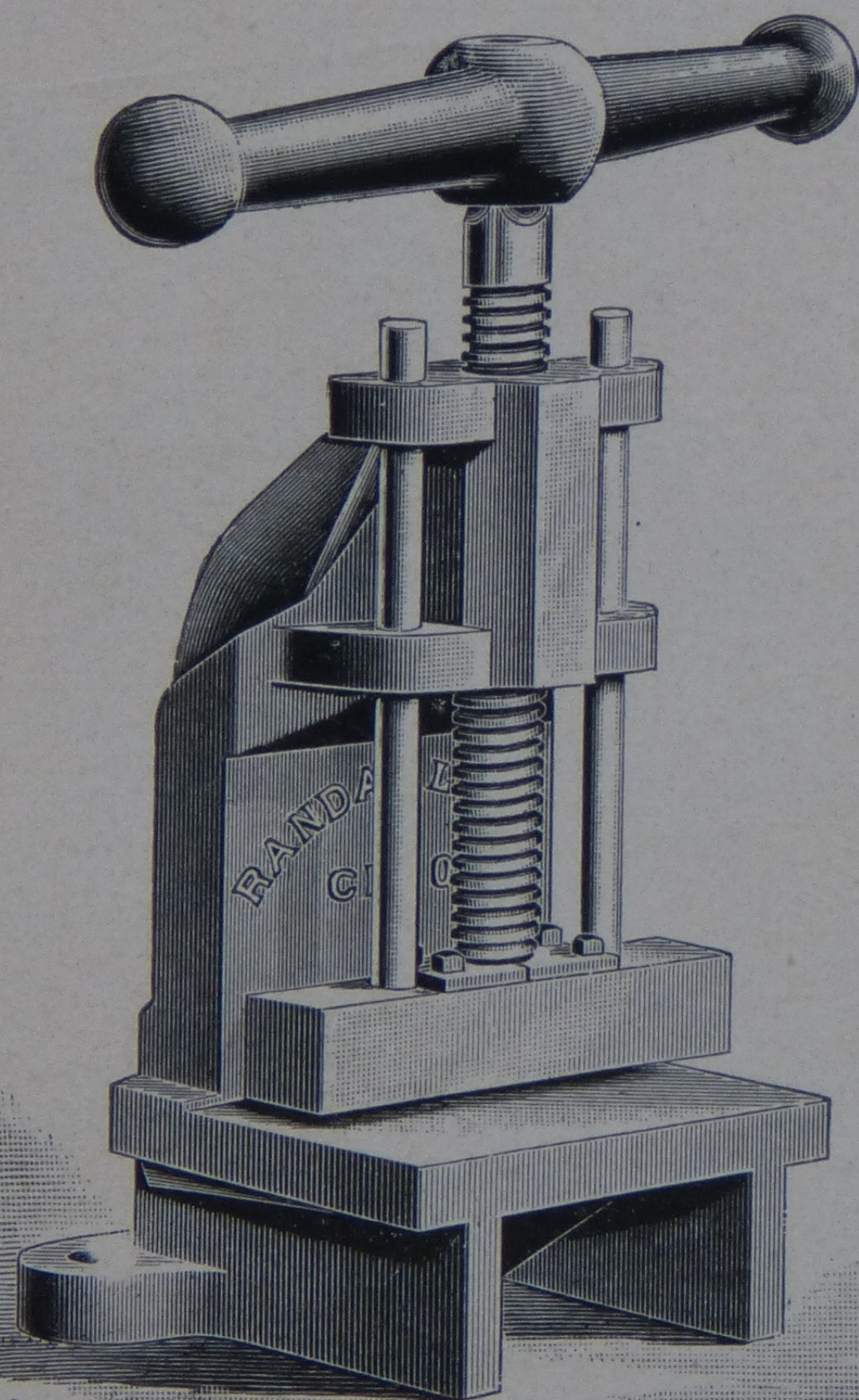
Our Harness Presses with the pressure-bar are superior to any we make, as the twisting pressure of the screw is overcome, and the pressure on the loop from the bar is more uniform than when the pressure is applied from the end of a screw bearing on the plate resting on a loop die.

No. 3½ Press has a heavy 100 pound ball lever same as No. 4 Press, for pressing where a hammer blow is desired. Best press at the price made.

Diameter of screw, 1⅝ inch; length of lever, 31 inches. Table, 10 x 6 inches. Greatest space under pressure bar, 8 inches.

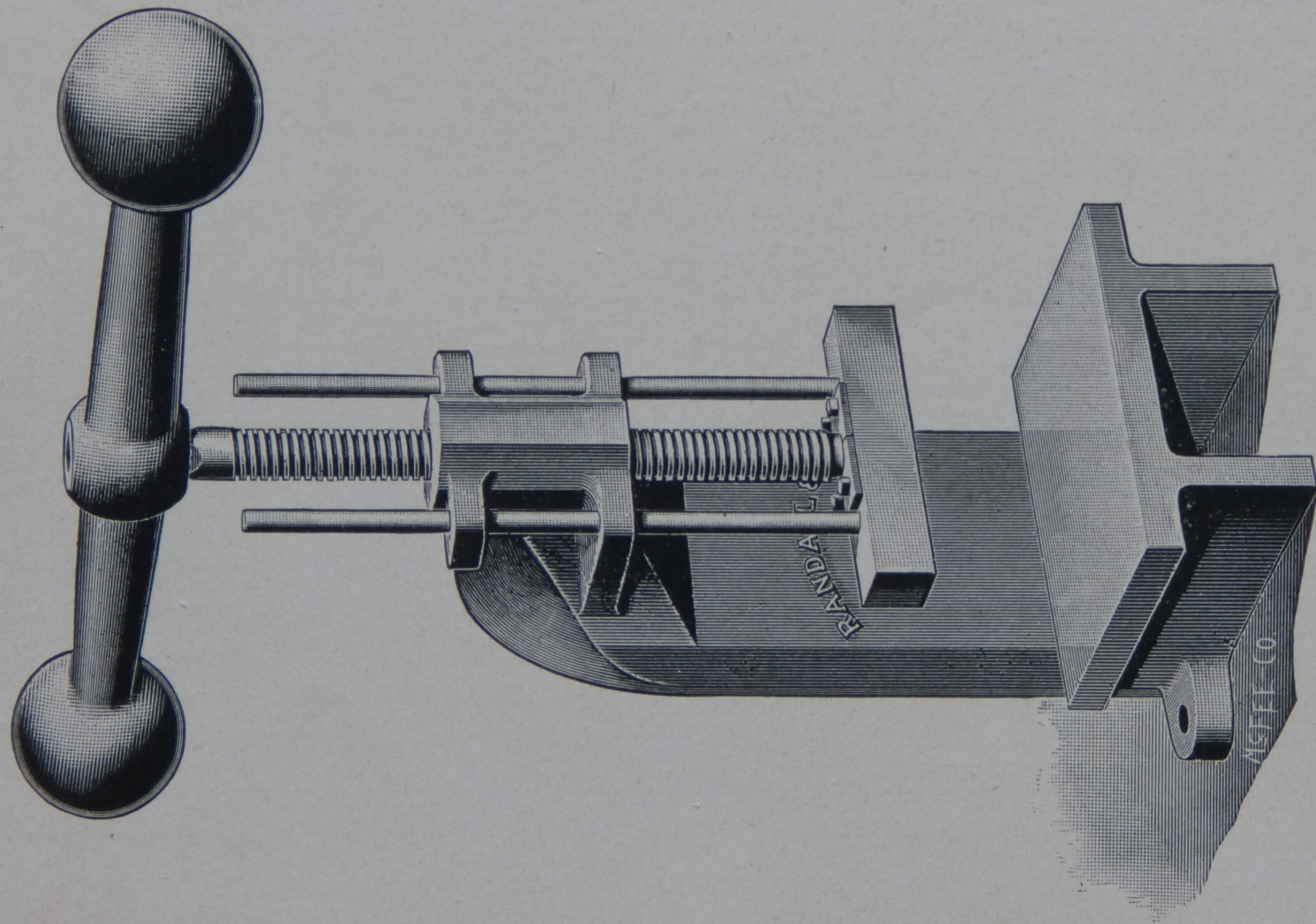
No. 3 Harness Press, (225 lbs.).....\$25.00

No. 3½ “ “ (300 lbs.)..... 30.00



No. 4 HARNESS PRESS.

500 Pounds. Pressure Bar. Heaviest—Best Quality—Low Priced Press Made.



This Press is the same general design as No. 3 Press, but larger and heavier, weighing 500 pounds. Diameter of screw, $1\frac{5}{8}$ inches; length of lever, 44 inches; weight of lever, 100 pounds; table 13 x 10 inches, greatest space under pressure bar, 13 inches.

We guarantee it to do pressing equal to that done on Presses weighing 1,000 pounds, and it is sold for half the money.

Price, \$45.00

POWER PRESS AND DIE CUTTER.

OUR Power Press has been in practical operation for several years, in the largest and best factories, and now we are prepared to fully guarantee it to do all the pressing of any kind required about a wholesale Harness, Saddlery or Collar Factory.

Page 49 shows the Press ready for loop pressing.

The lightest loop or the heaviest mould work can be pressed in this machine, and the work produced is pressed in the best manner possible.

For pressing Loops, Trace and Breeching Point Layers, Turnbacks, Blinds, and Collar Pads, or any other mould work, it will produce from three to five times more work than can be done by any ordinary Screw Press. For mould pressing, the moulds may be attached to the table and beam of the press. The press is carefully built. Best material and workmanship.

A Cutting Block may be used with the machine, and the Press turned into a most excellent Die Cutter.

The space between the upright posts is 25 inches, and either Handled or Machine Cutting Dies up to 24 inches in length for cutting Gig Saddle Skirts, or smaller Dies for cutting Collar Pads, Blinds, Cruppers, etc., can be used to advantage. Several thicknesses of leather can be cut at a time.

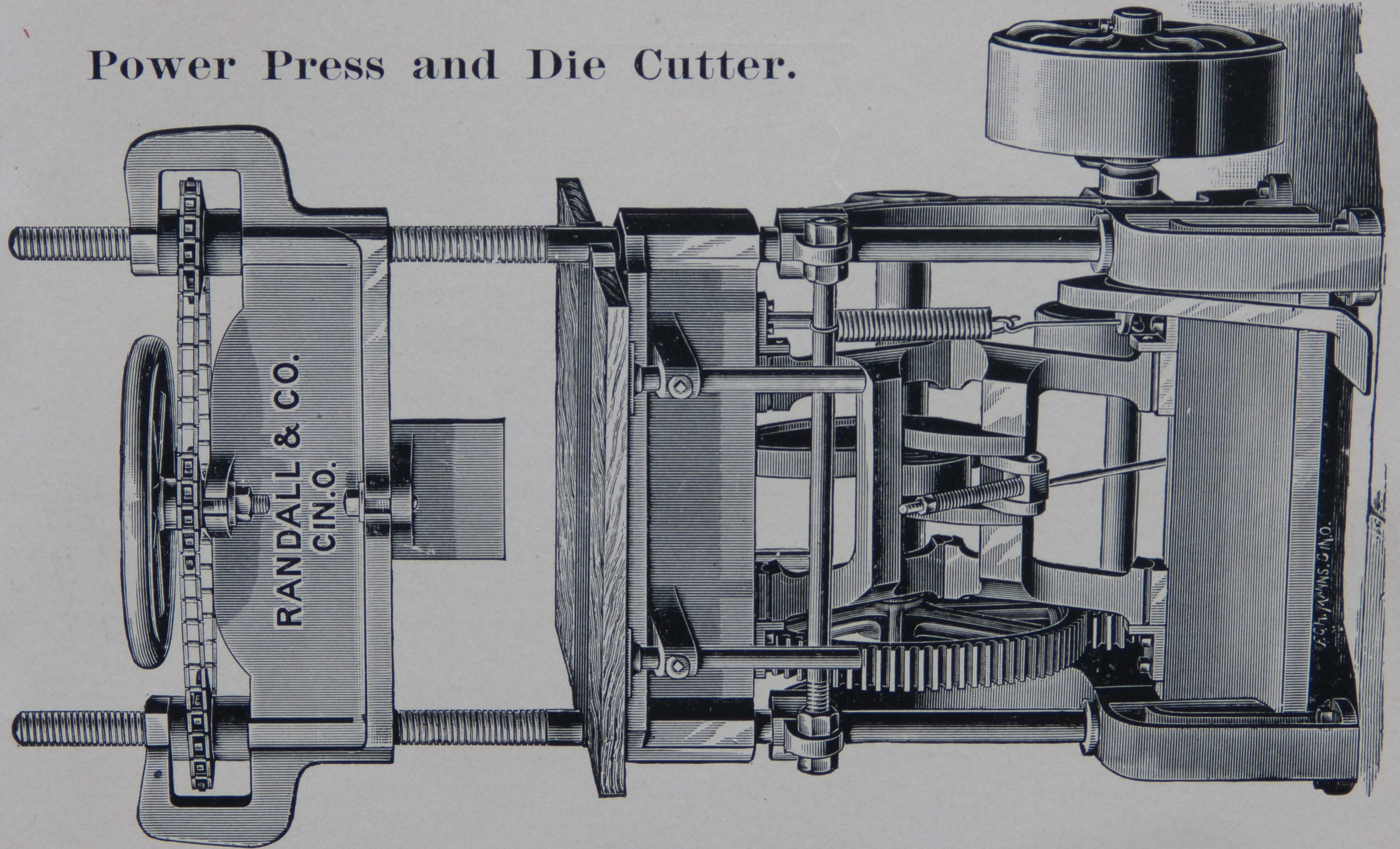
The Belt Flywheel is constantly in motion. The machine starts and stops by treadle, and is almost instantaneous, and the work being pressed may be left under pressure any length of time desired. The press is operated by the Treadle and Hand-wheel. With the hand-wheel the pressure of the beam on the work may be easily and quickly increased or diminished.

This Machine is a most valuable one, and no wholesale Factory, (even if running a few hands only) can afford to be without it, and it will pay for itself in a very short time.

The Pulley revolves toward the front of the Machine. Diameter of Pulley, 16 inches; face, 5 inches. Speed, 240 revolutions per minute. Weight, about 2,100 pounds.

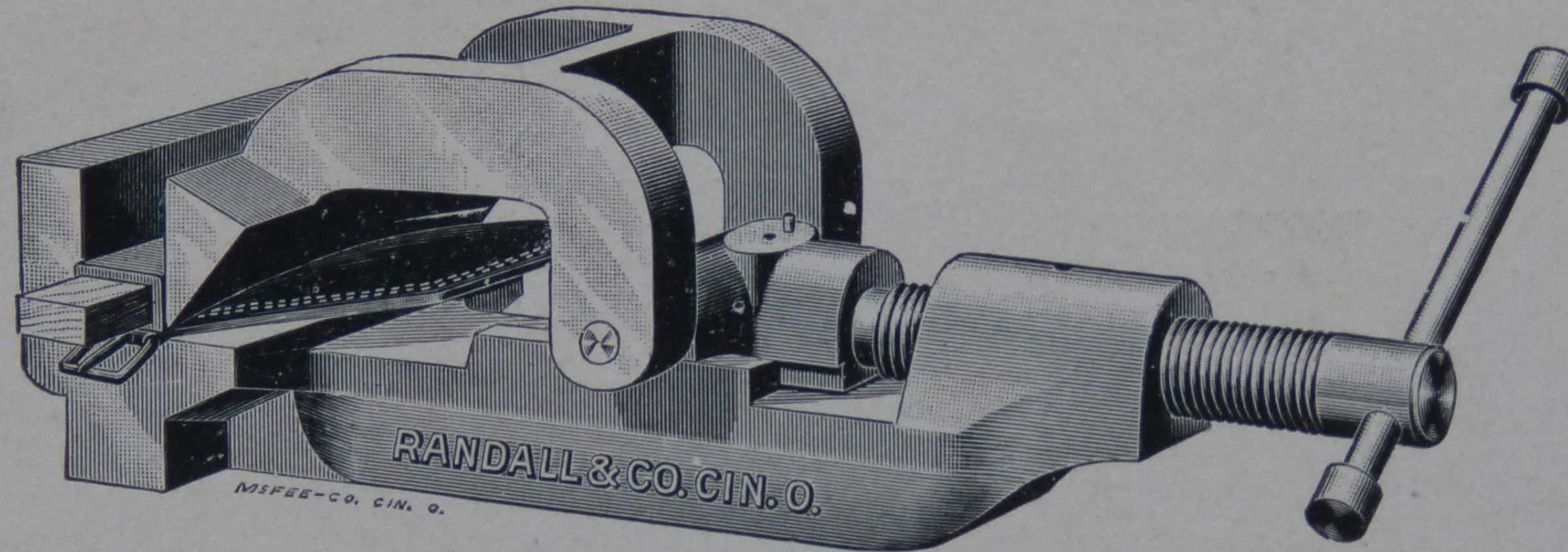
Price, \$175.00

Power Press and Die Cutter.



CHEEK LOOP BOX.

First Quality. 1¼ Inch Screw. Reliable. 45 Pounds.



In every respect this is the best Cheek Loop Box we can make.

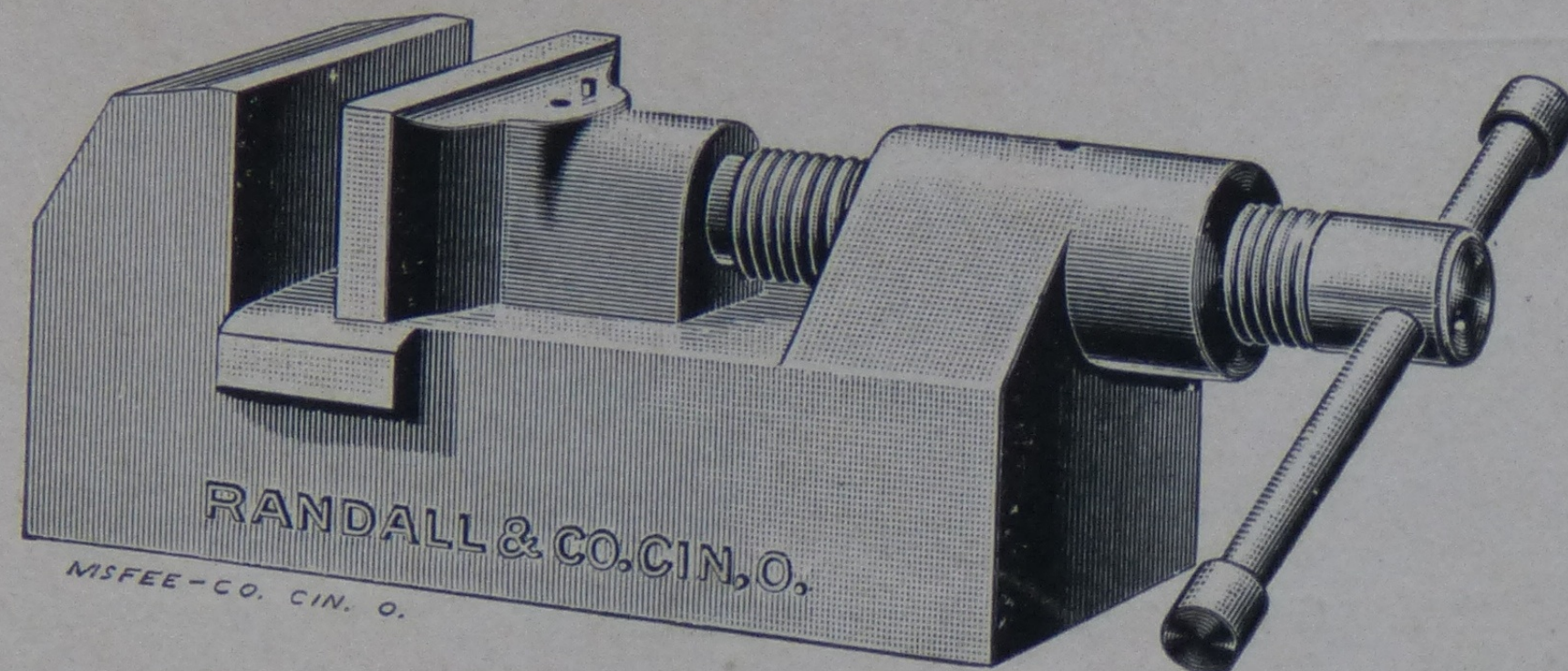
The jaws are 7½ inches long, and open sufficiently wide to admit of pressing the largest size Cheek Loops when side crease plates are used. Has a screw 1¼ inch diameter, with a screwbearing (or nut) 3¼ inches long. Weight, 45 lbs. The hinge of the Jaw is fitted closely into gibs, which prevents all side motion of the Jaw. The base is grooved, and a flat plate inserted, which can be removed and our Brass Bottom Plates used for rounding and finishing the bottom of loops when so desired.

Side Crease Plates may be attached permanently to the Jaws of this Cheek Loop Box, thus securely holding the Side Crease Plates and preventing annoyance by the plates becoming loose, as when held by wax. (Side Crease Plates extra.) Attaching Side Crease Plates to the Jaws, \$1.00

Cheek Loop Boxes of steel to order.

Cheek Loop Box, \$7.50

Hame Tug Loop Box.



Jaws, $4\frac{1}{2}$ in. Extra Strong.

In the past the wholesale and retail Harness trade have been annoyed greatly by very frequent breakage of Hame Tug Loop Boxes, constructed in too light a manner. The Hame Tug Loop Box shown in this cut is made to overcome this annoyance.

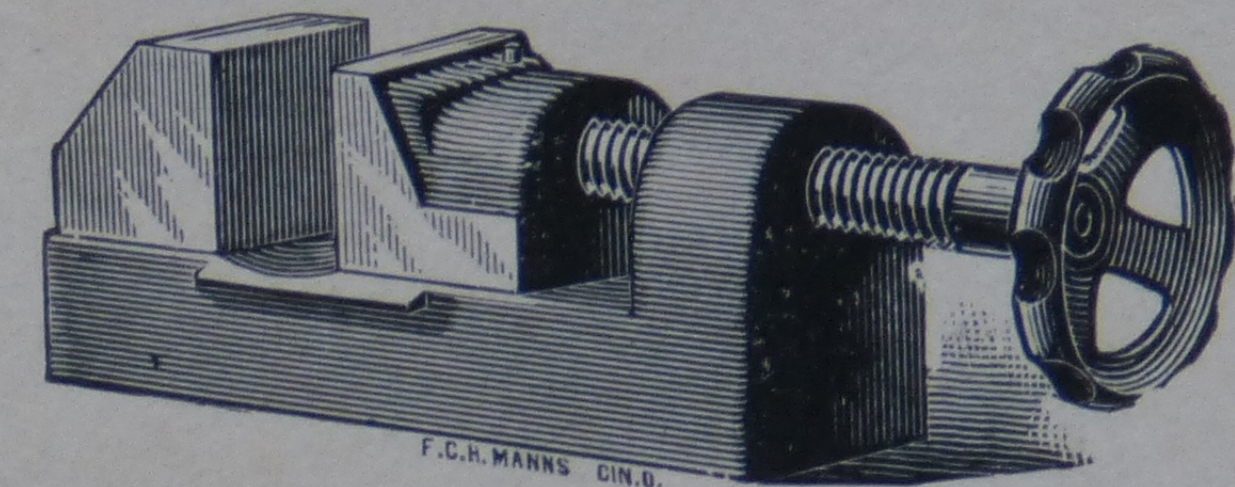
It is made strong; weight, 40 lbs. Has a screw $1\frac{1}{4}$ inches diameter; a long screw bearing (or nut), and is strictly first-class.

We can recommend this as a first-class Hame Tug Box in every respect, and it is sold at the price of Boxes greatly inferior. Steel Boxes to order.

Any Length of Jaw to Order.

Price \$ 6.00
Extra large and heavy, $7\frac{1}{2}$ 8 and 9 in. Jaws. 10.00

Shaft Tug Loop Box.



Made any length of Jaw for Small Loops,
 $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2 inches, etc.

In pressing small Loops for Shaft Tugs, Hip Straps, etc., a very neat finish to the back of the Loop can be given by using our Brass Bottom Plates in these Boxes, page 63. We make to order any length and width of Brass Bottom Plates, fit in a groove in the base of the Box. This holds the plate securely in proper position. A much neater job can be made by using these Bottom Plates than when the Loop bears on the flat base of the Box, as the Brass Bottom Plate forms and polishes the Loop, at the same time the Loop Die makes its impression on the face of the Loop.

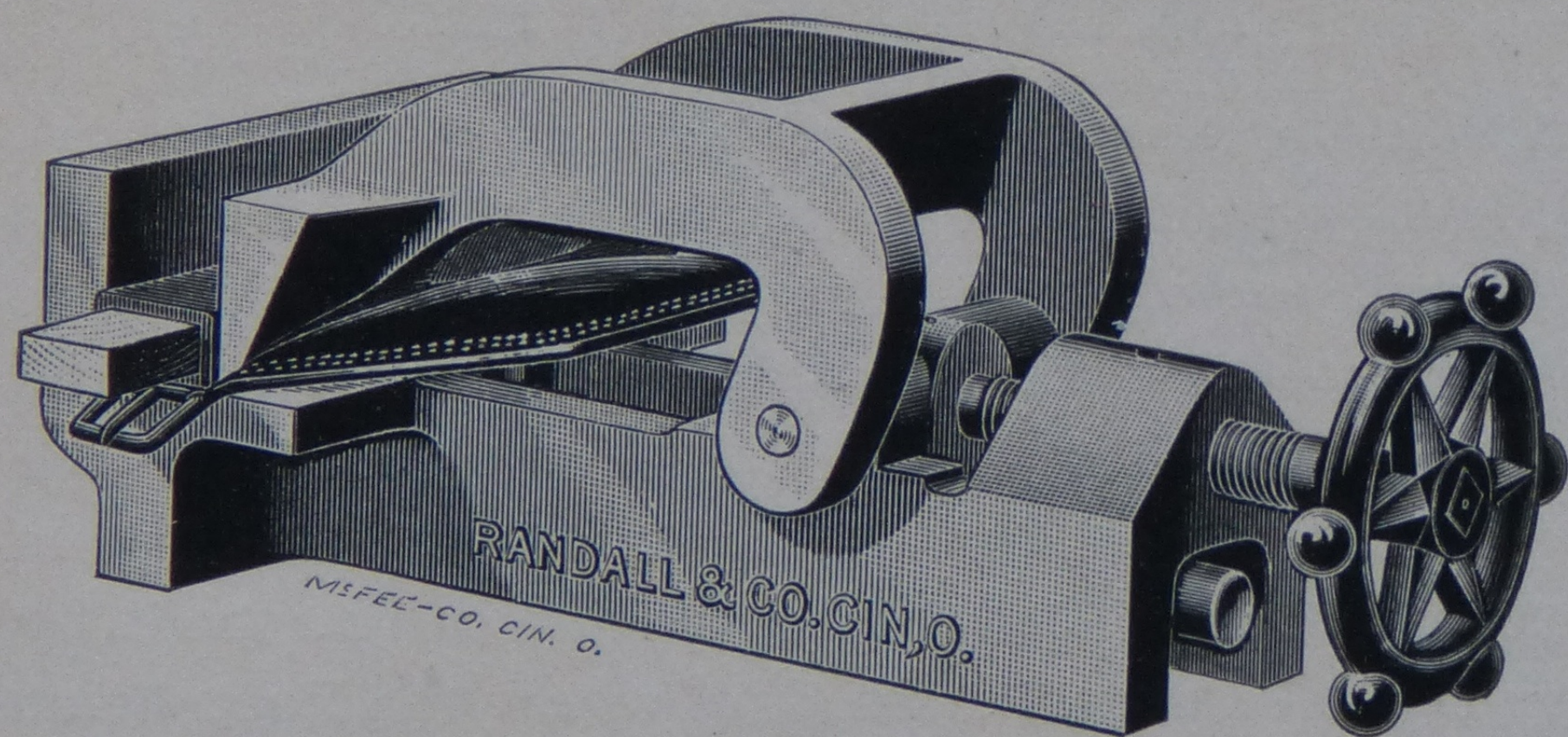
Price.....\$5.00

**Any Style and Length of Side Crease Plates
made to fit our Loop Boxes. Page 66.**

COMBINATION LOOP BOX.

CHEEKS—TUGS—SMALL LOOPS.

33 POUNDS.



\$7.50

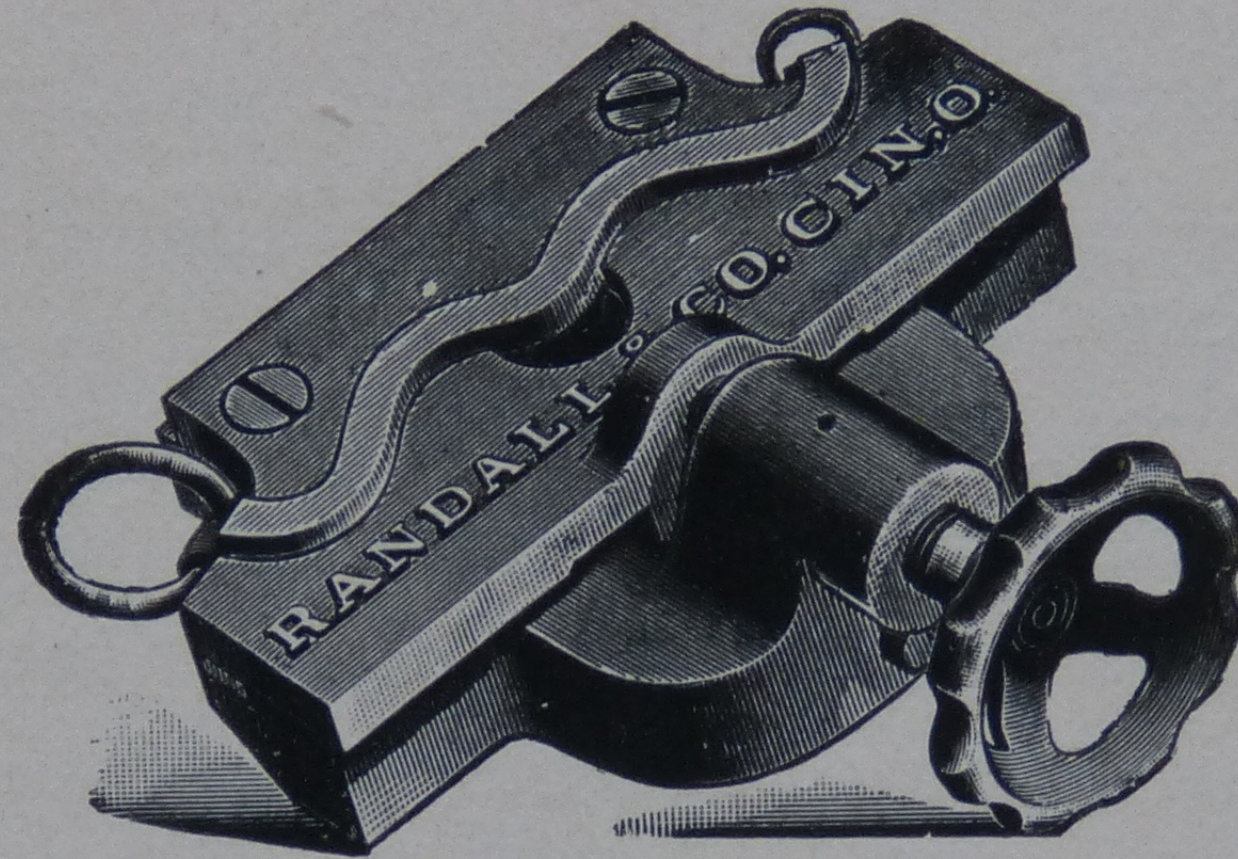
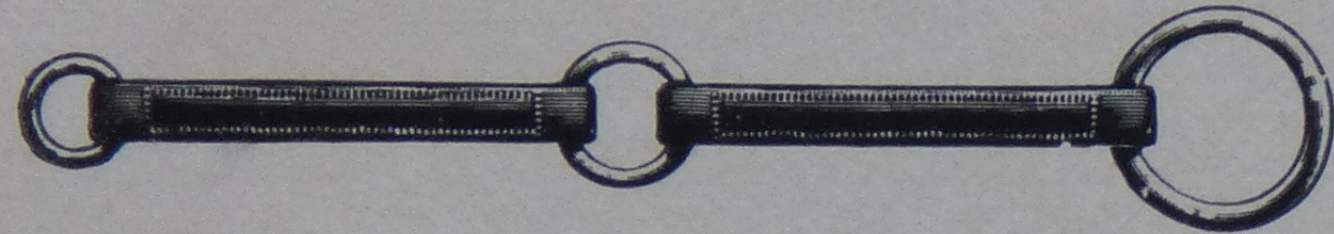
This Box is designed specially for custom shops. The Jaws are made so that they are suited for pressing either Cheek or Tug Loops, and *small side plates are furnished*, which may be used in the box for pressing small loops. Jaws open $2\frac{1}{2}$ inches; $7\frac{1}{2}$ inches long. The box weighs 33 lbs., and is thoroughly reliable.

This box with the No. 1 Press, page 44, makes the best low-priced outfit for pressing loops in the country.

If parties wish a heavier Press, the Nos. 2 and 3 will answer for all Loop, Pad and Blind Mould work.

BREECHING STAY FORMING BOX.

BEFORE



AFTER.



The Breeching Stay Forming Box is a tool with which Stays may be shaped and pressed in the best possible manner in the least time possible.

After the Stays are sewed and trimmed they are pressed into shape, the top and bottom of the Stay are pressed by a brass plate, very carefully made and smoothly finished. This plate bears on the back, face, and edges of the Stay, which gives it a smooth finish on the face, back and edges, nicely rounding the edges.

The standard size is $\frac{1}{2}$ inch. *The $\frac{5}{8}$ inch size made to order.*

The length of each half of the Stay between the rings is $3\frac{7}{8}$ inches. It is a labor saver.

They will do the work. Recommend them fully.

Breech Stay Forming Box, $\frac{1}{2}$ Inch, \$15.00

LOOP DIES.

WE have given special attention to this line, and are producing dies, both old and new styles, which are the best in material and workmanship made. They are made of a high grade of bronze metal, and are carefully finished.

Our "F," "G," "H," "I," "J," "K," "L," "M," and "N," are new designs, and are very popular with the trade. We shall constantly add to them, and our aim is to make the best line of dies that it is possible to make and sell for \$9.00 per set.

Parties making their own designs may have our lowest prices quoted on application. Any style or size of loop die made to order. Order the width of the die by the width of the strap.

PRICES:

A complete set of 9 Dies, any one style D to N (Sizes as below).....\$9.00

SINGLE DIES.

Cheek Dies, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ x $7\frac{1}{2}$ each\$2.00

Hame Tug Dies 1, $1\frac{1}{8}$, $1\frac{1}{4}$ x $4\frac{1}{2}$ each..... 2.00

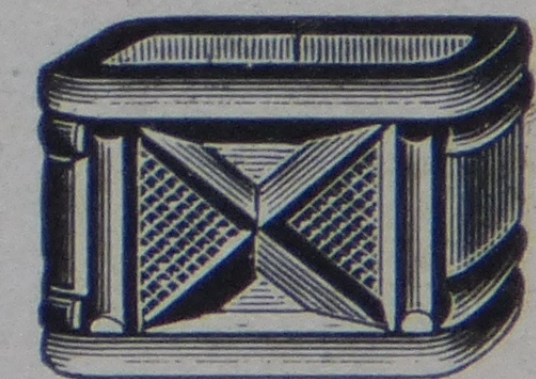
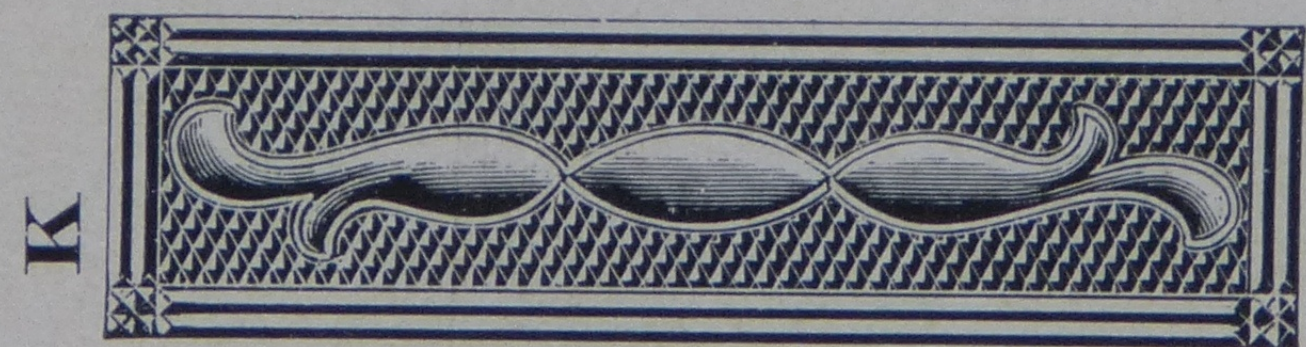
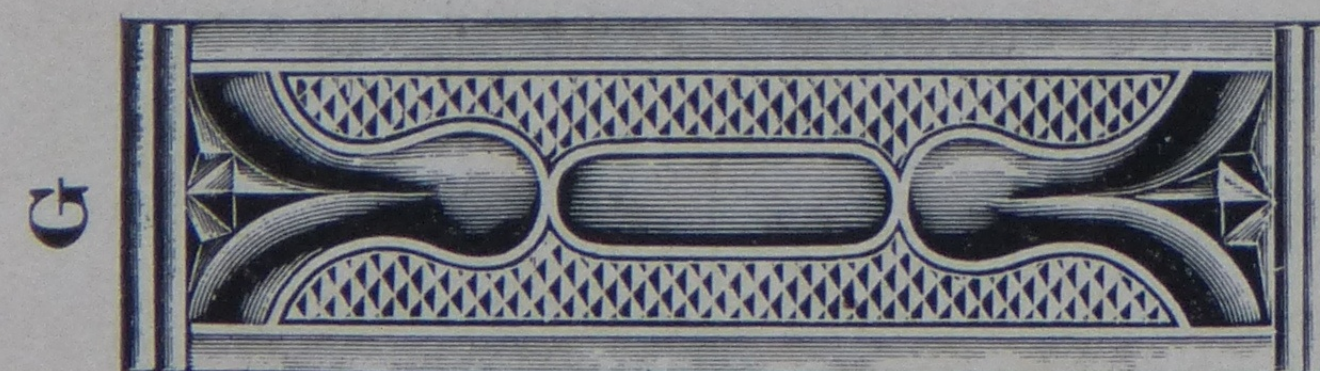
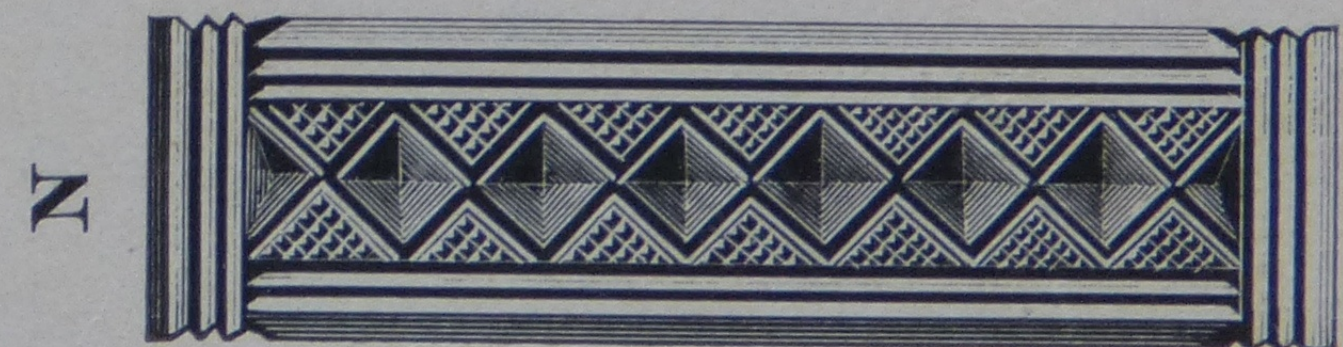
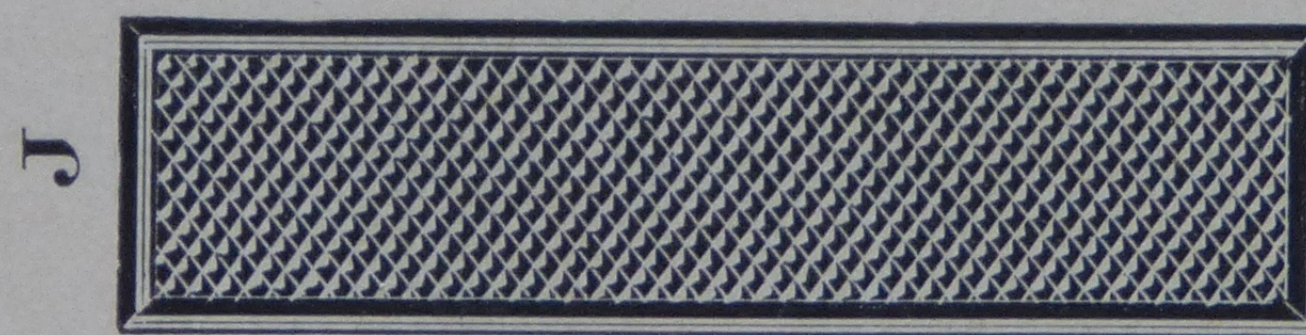
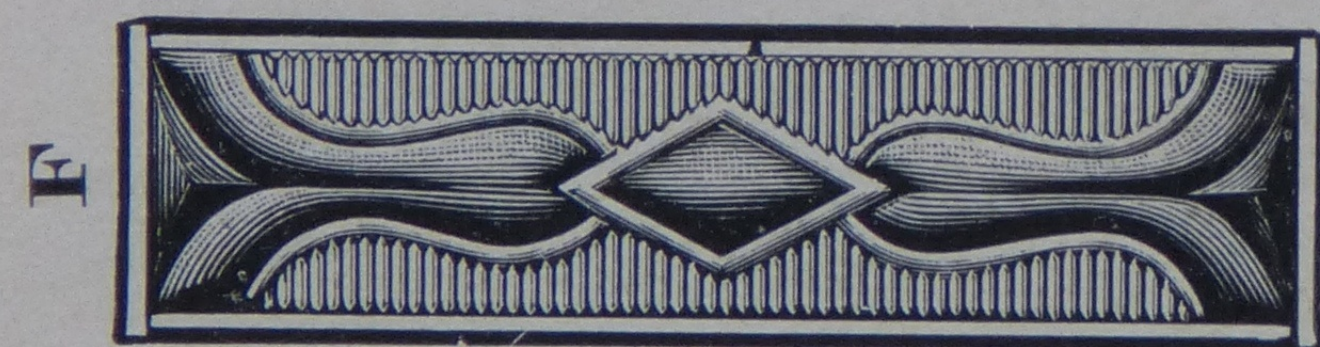
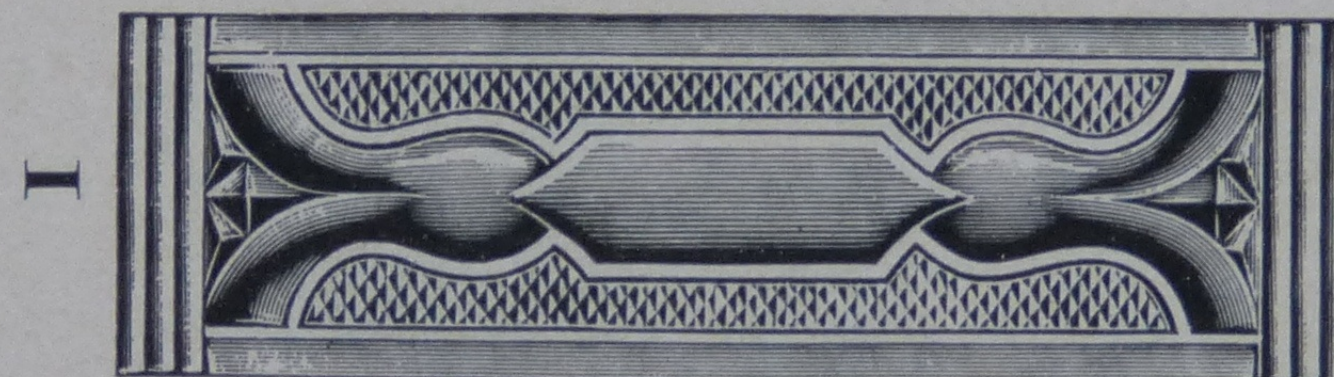
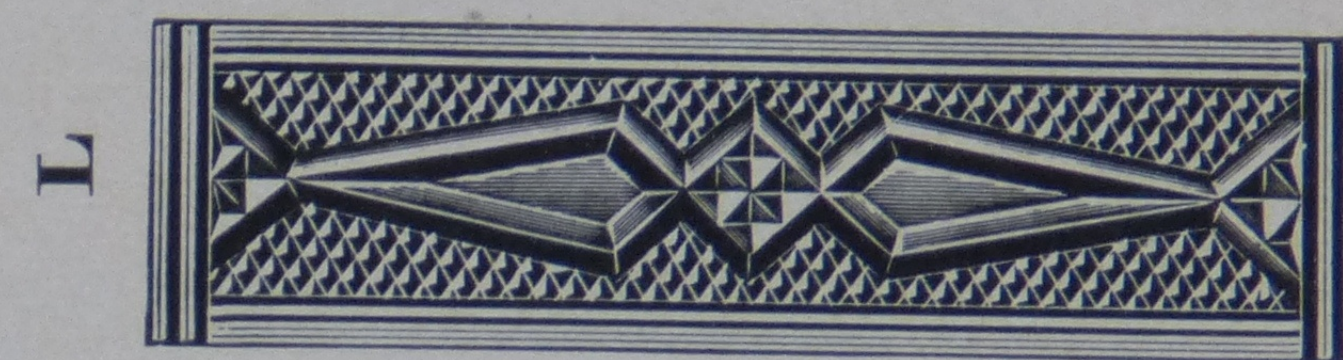
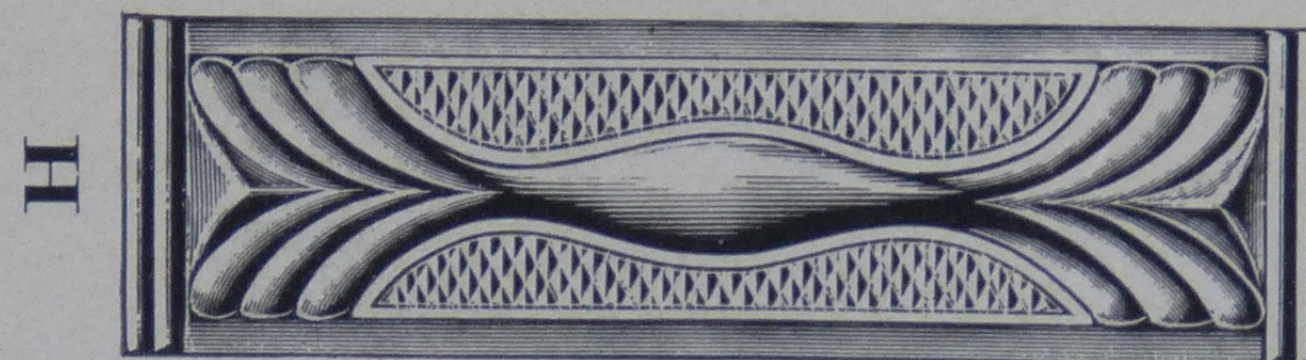
Small Dies, any width up to $1\frac{1}{4}$ by $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{3}{4}$ 2 inches long, each 1.65

Odd sizes of dies made at proportionate prices.

Sizes in a set..... $\frac{1}{2}$ x $7\frac{1}{2}$, $\frac{5}{8}$ x $7\frac{1}{2}$, 1 x $4\frac{1}{2}$, $1\frac{1}{8}$ x $4\frac{1}{2}$, $1\frac{1}{4}$ x $4\frac{1}{2}$, $\frac{3}{4}$ x 2, 1 x $1\frac{1}{2}$, $\frac{7}{8}$ x $1\frac{3}{8}$, $\frac{5}{8}$ x $1\frac{3}{8}$.

Steel Backing saves the Die, (page 63). $7\frac{1}{2}$ — $4\frac{1}{2}$ long, 65c. Under 3 inches, 50c.

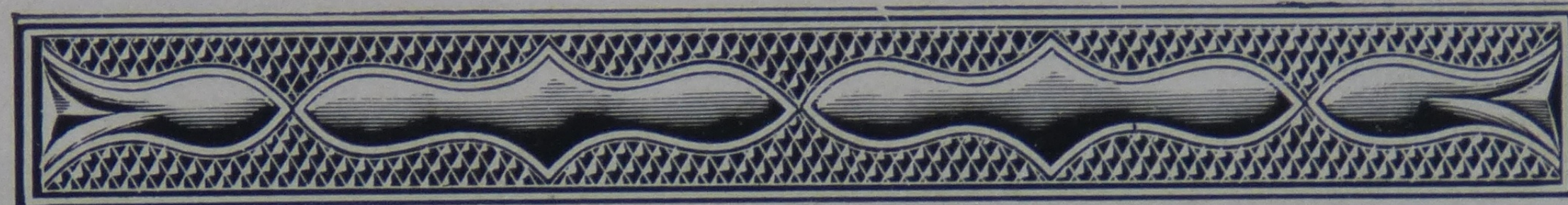
STYLES OF LOOP DIES.



Style 1. See page 62. Style 2.

The cuts on pages 56 to 60, show the outline and figure on the various dies comprising a set.

Style "D" Cheeks.



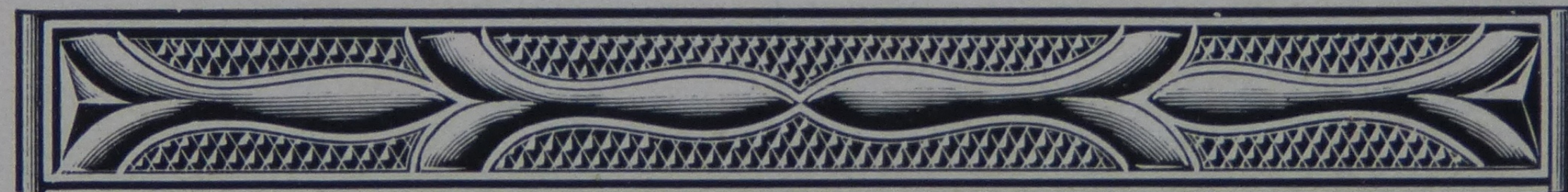
Hame Tugs.



Small Loops.



Style "E" Cheeks.



Hame Tugs.

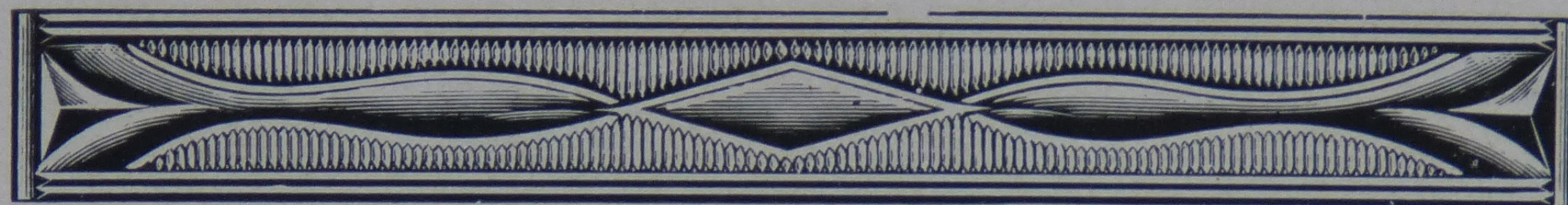


Small Loops.

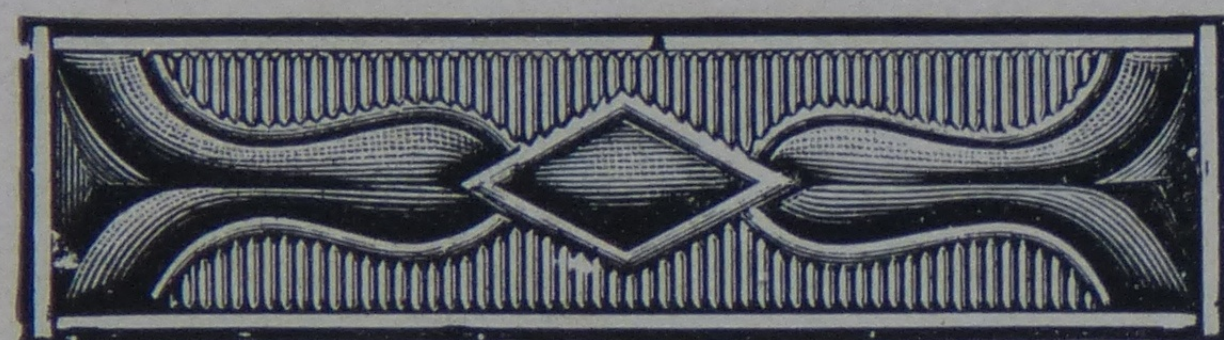


Prices on Page 54.

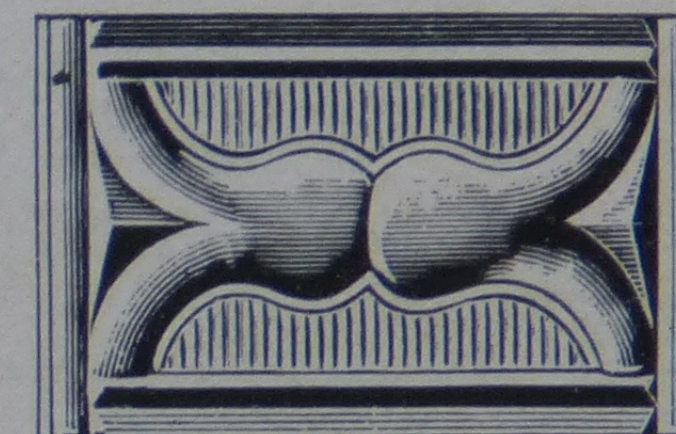
Style "F" Cheeks.



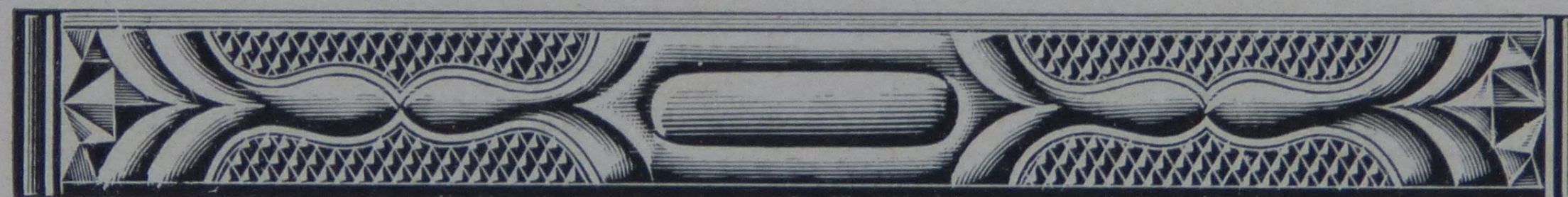
Hame Tugs.



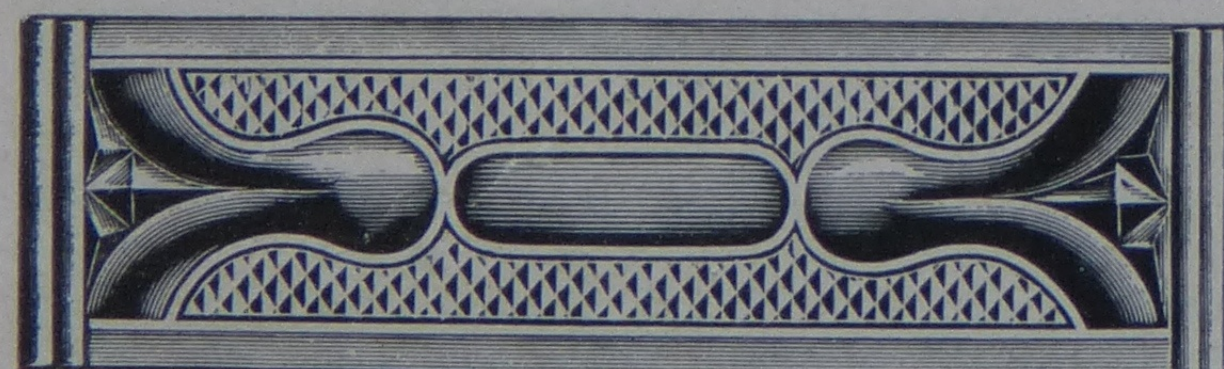
Small Loops.



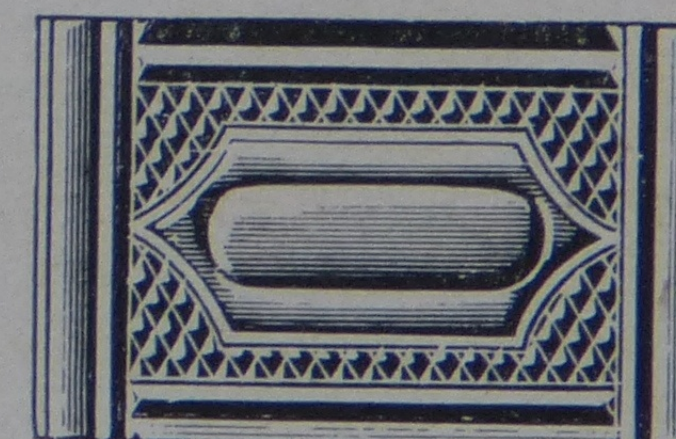
Style "G" Cheeks.



Hame Tugs.



Small Loops.

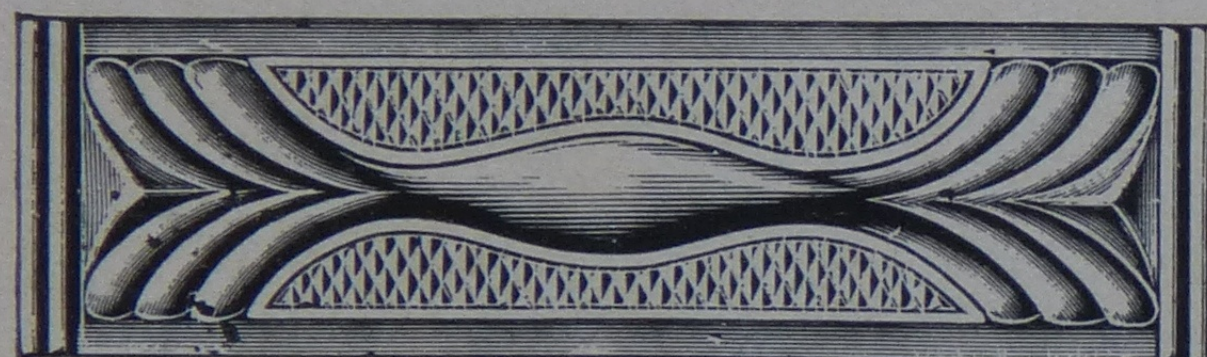


Prices on Page 54.

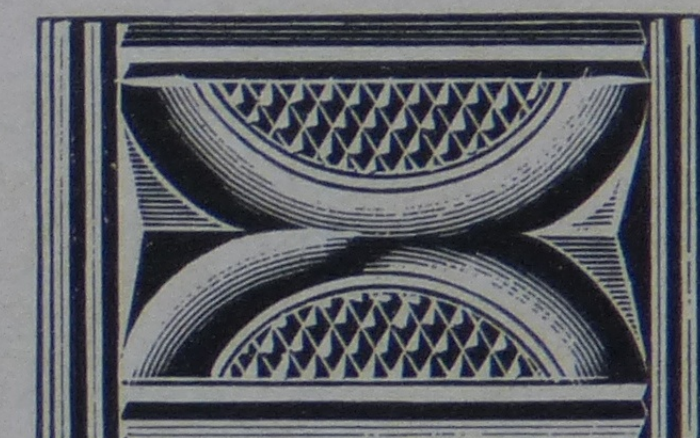
Style "H" Cheeks.



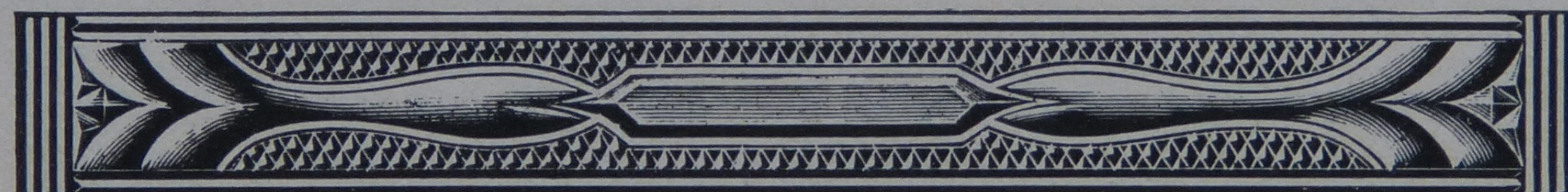
Hame Tug.



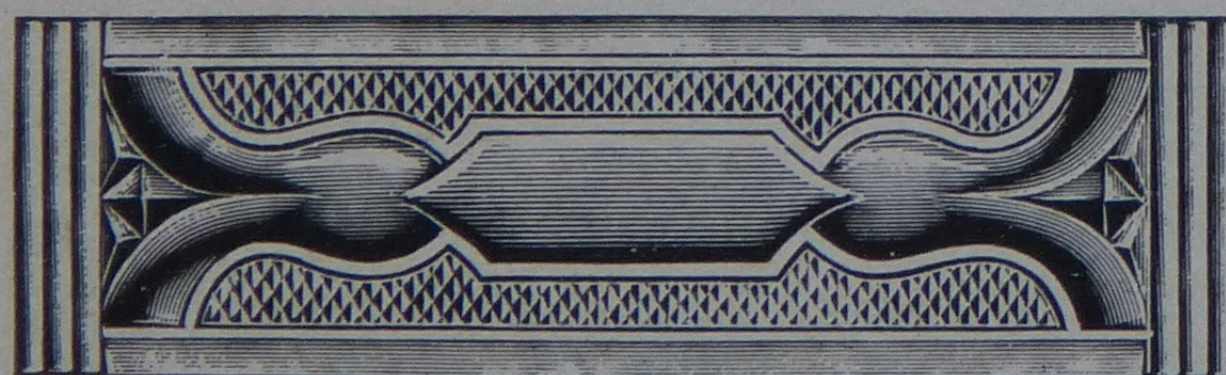
Small Loops.



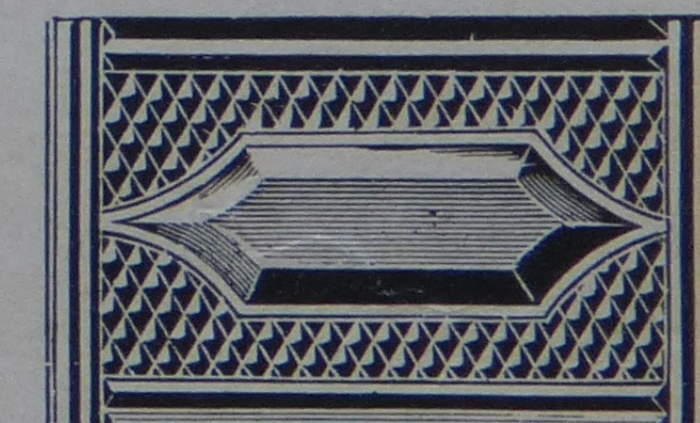
Style "I" Cheeks.



Hame Tugs.

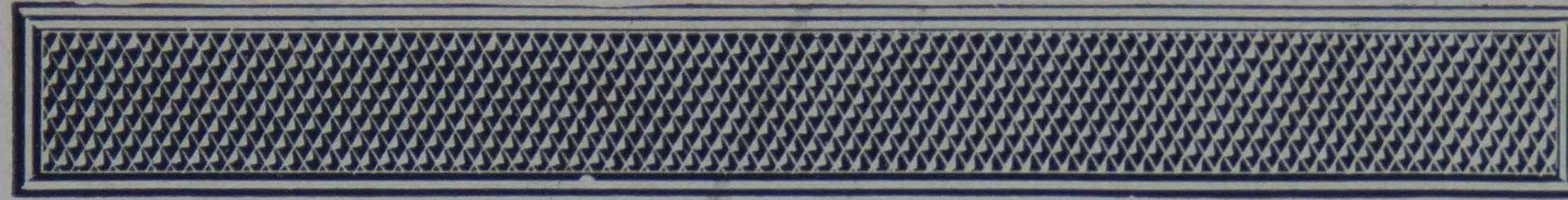


Small Loops.

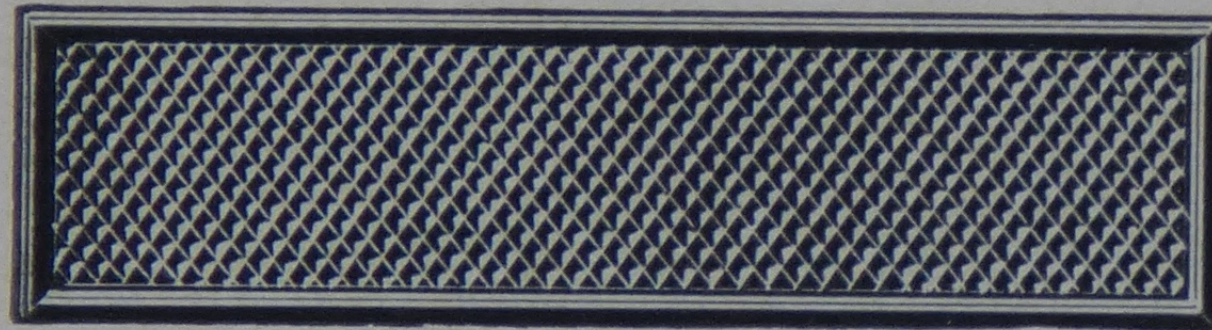


Prices on Page 54.

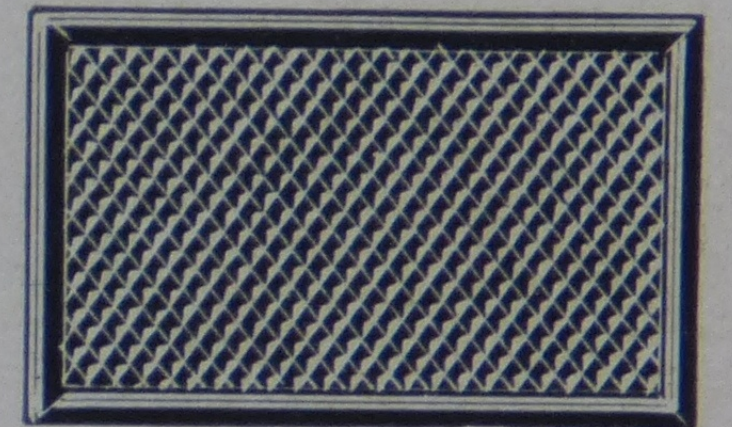
Style "J" Cheeks.



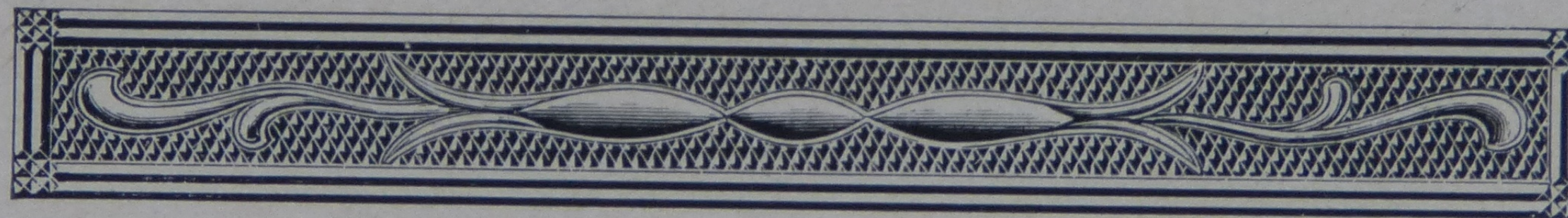
Hame Tugs.



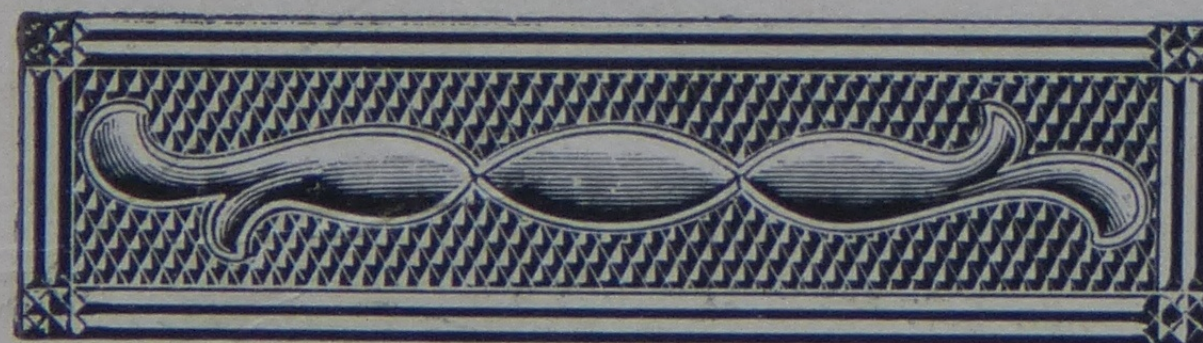
Small Loops.



Style "K" Cheeks.



Hame Tugs.

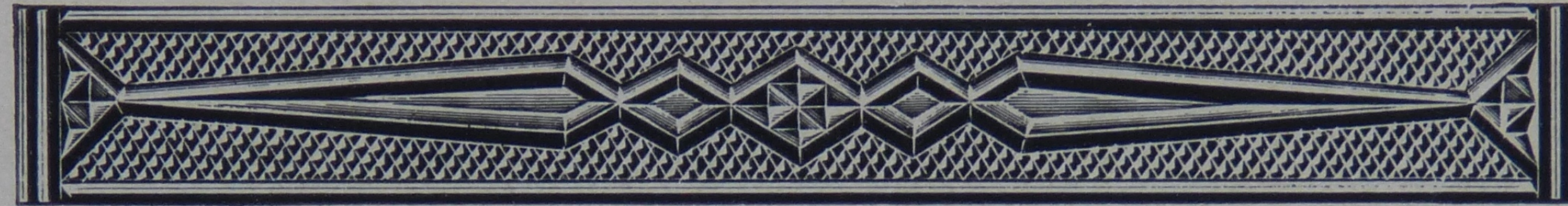


Small Loops.

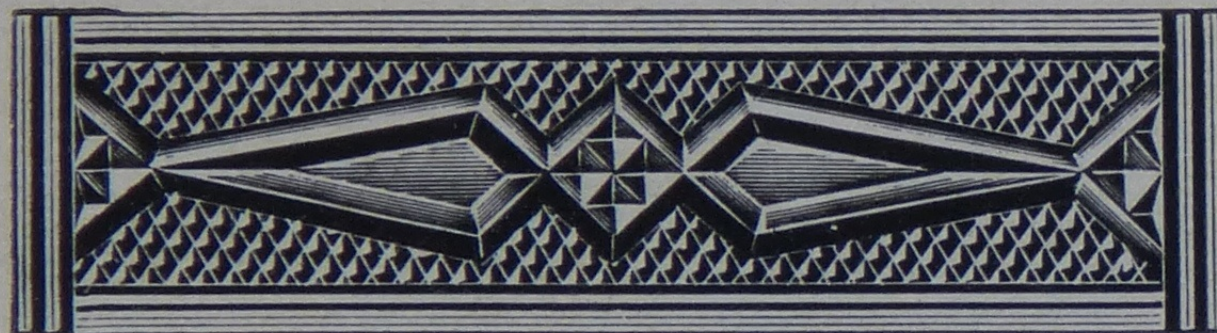


Prices on Page 54.

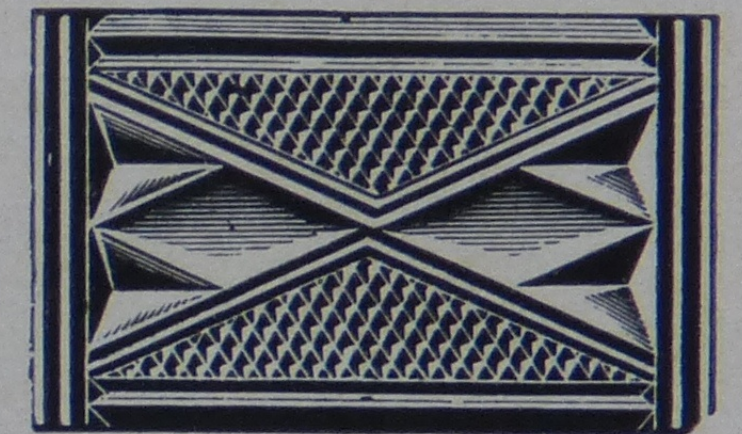
Style "L" Cheeks.



Hame Tugs.



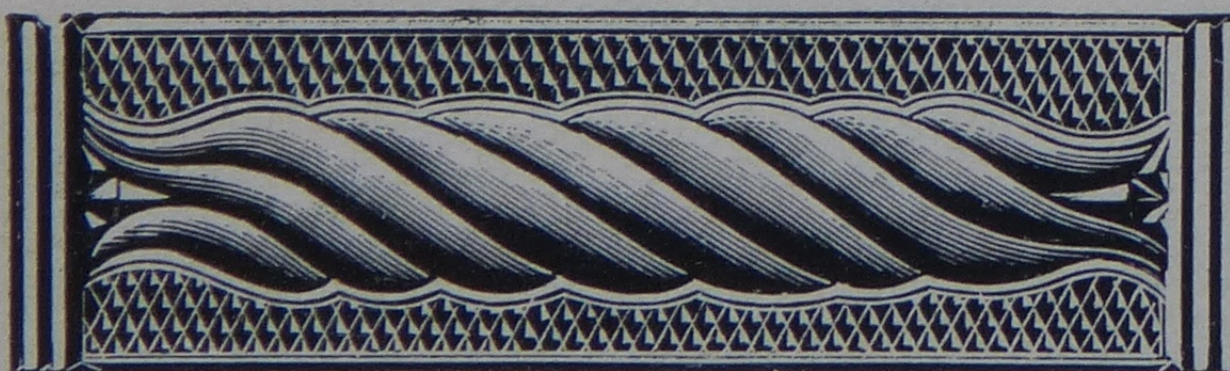
Small Loops.



Style "M" Cheeks.



Hame Tugs.



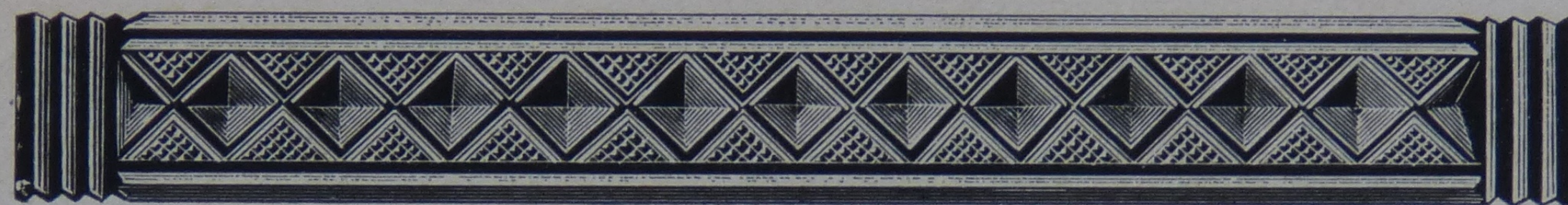
Small Loops.



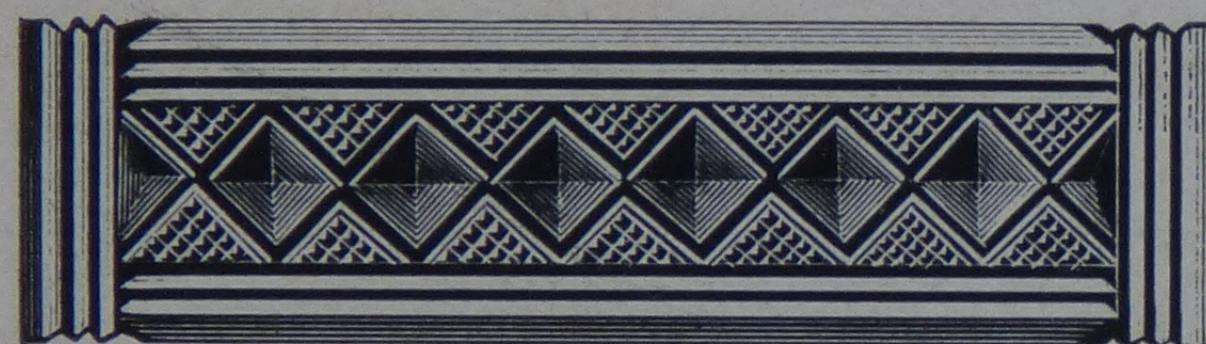
All Dies made of Highest-Grade Bronze Metal.

Prices on Page 54.

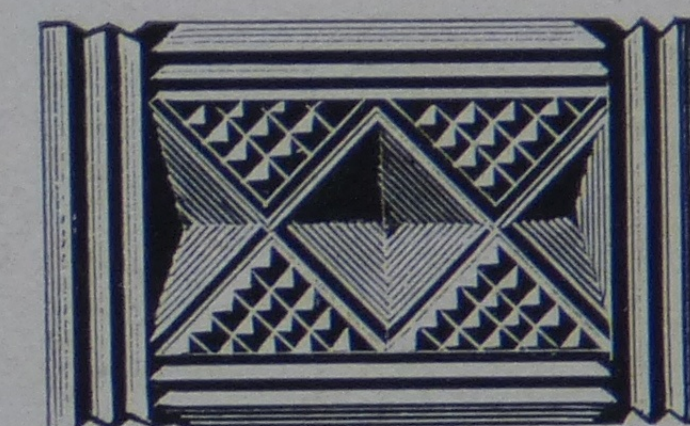
Style "N" Cheeks.



Hame Tugs.

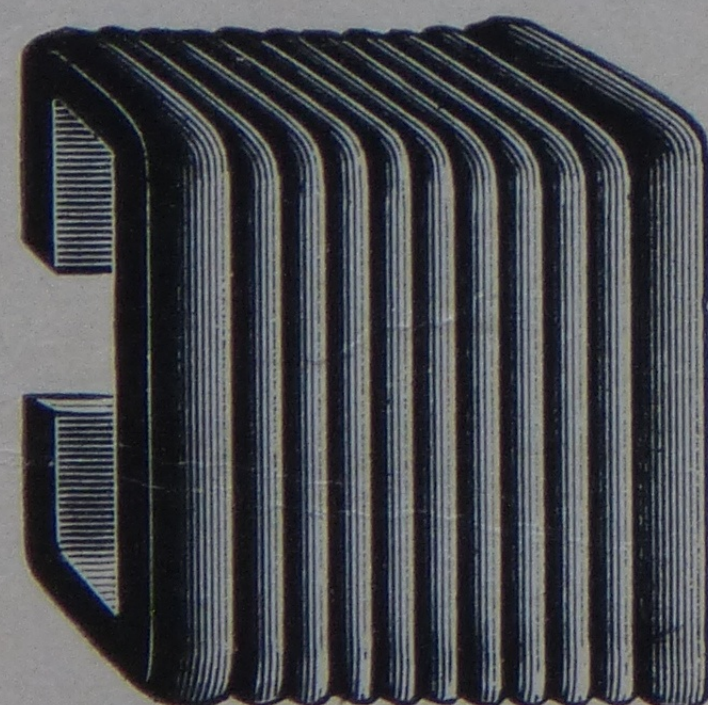


Small Loops.



Prices on page 54.

MOULDS FOR GIG SADDLE LOOPS.



This cut shows a loop formed by a Mould for Gig Saddle Bearers.

They are made so that one mould will make the length of loop desired, and any width of loop can be made by the one mould.

Moulds, with inside plate.....\$6.00

Any size order from any style pattern.

NARROW LOOP DIES.

Any Size Made to order.

STYLE 1.



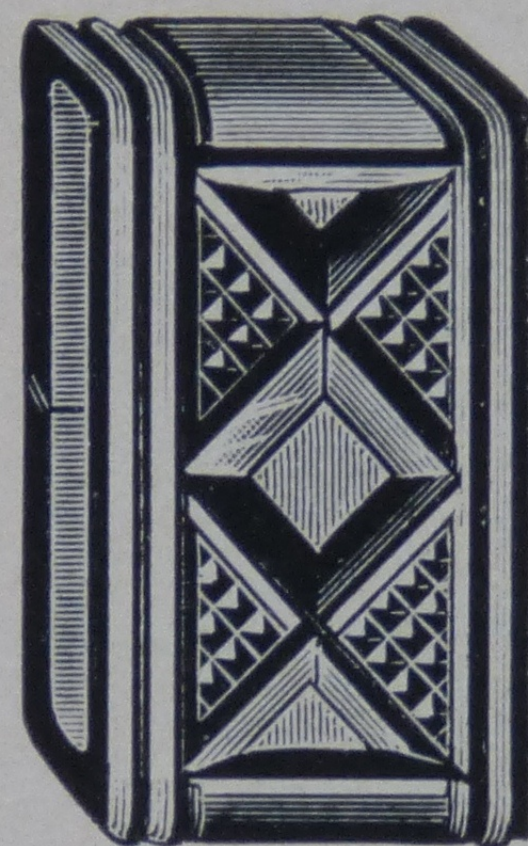
$\frac{1}{2} \times \frac{7}{16}$



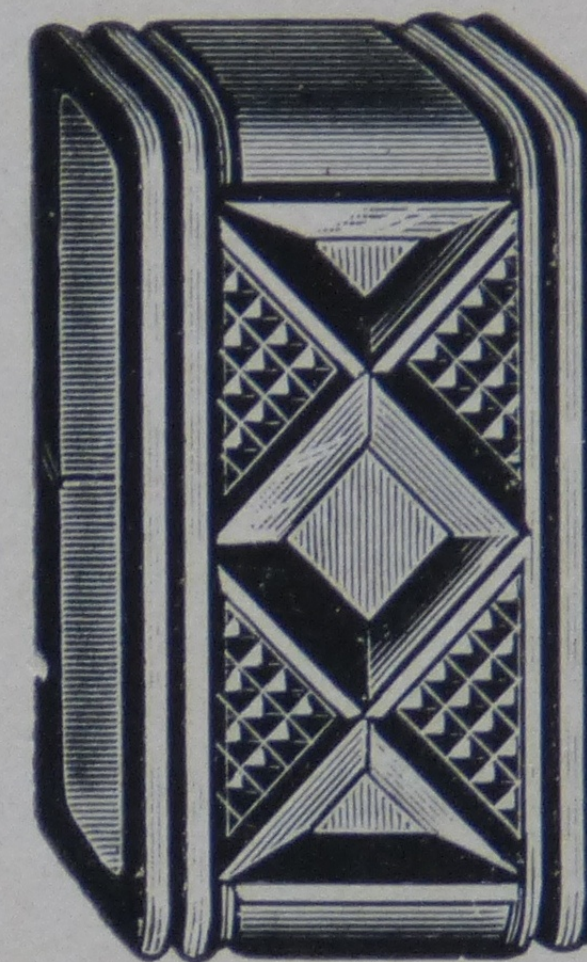
$\frac{5}{8} \times \frac{1}{2}$



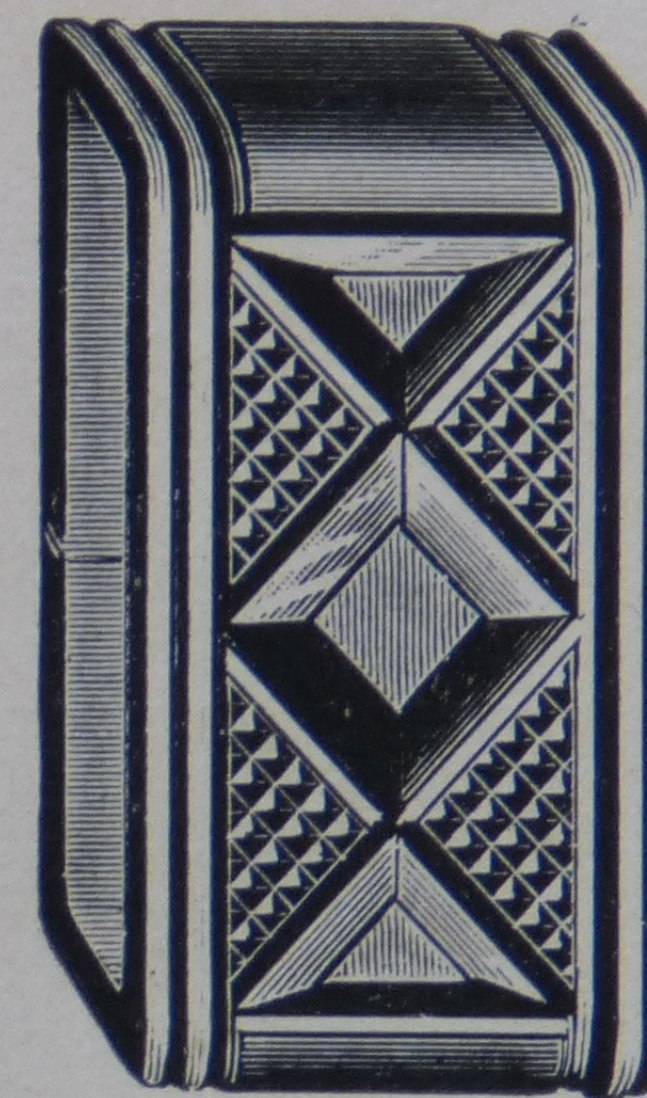
$\frac{7}{8} \times \frac{5}{8}$



$1\frac{1}{8} \times \frac{3}{4}$



$1\frac{1}{4} \times \frac{7}{8}$



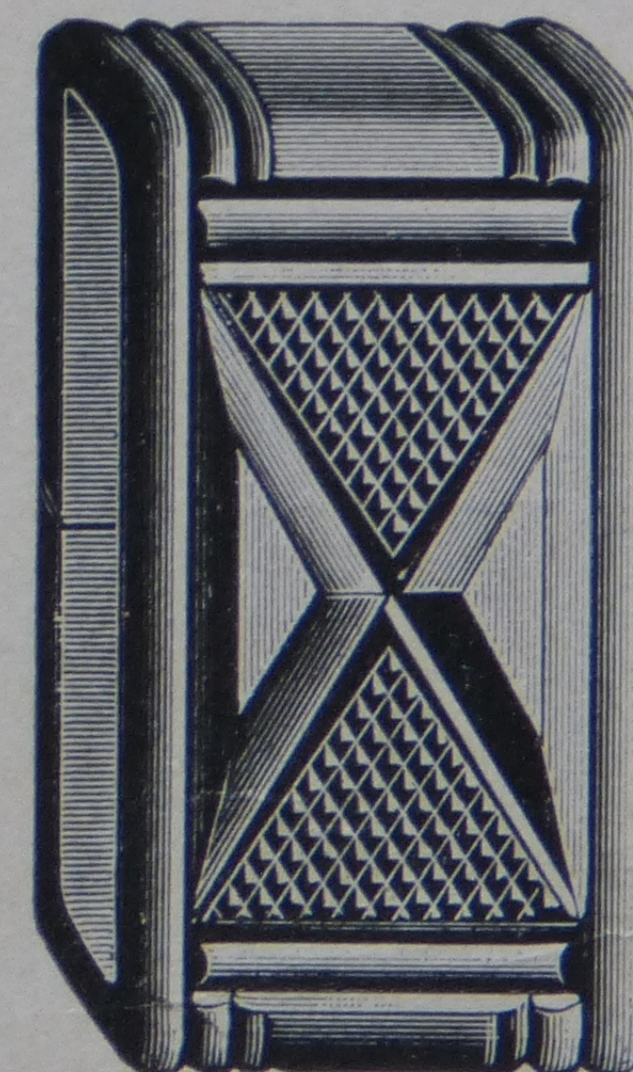
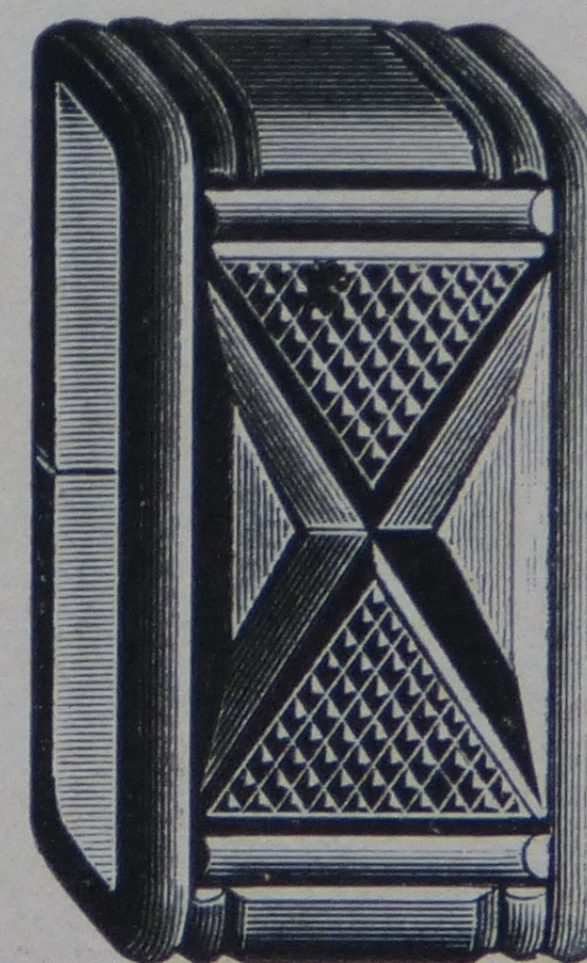
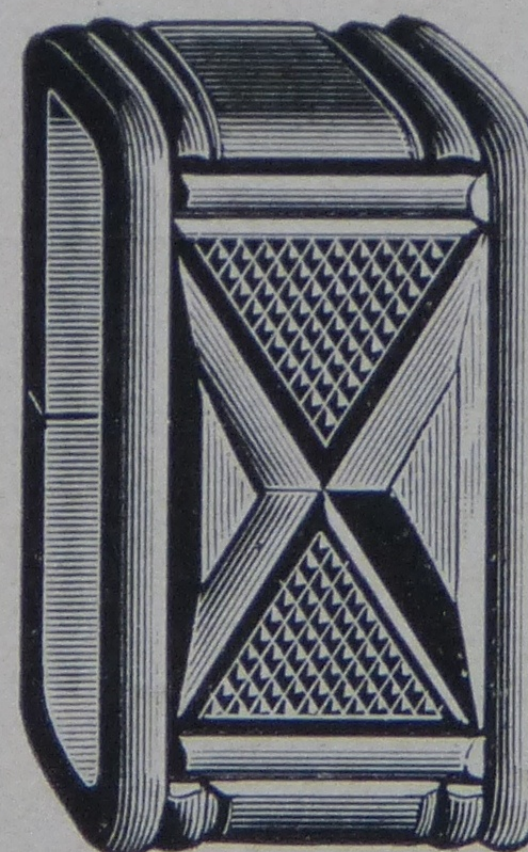
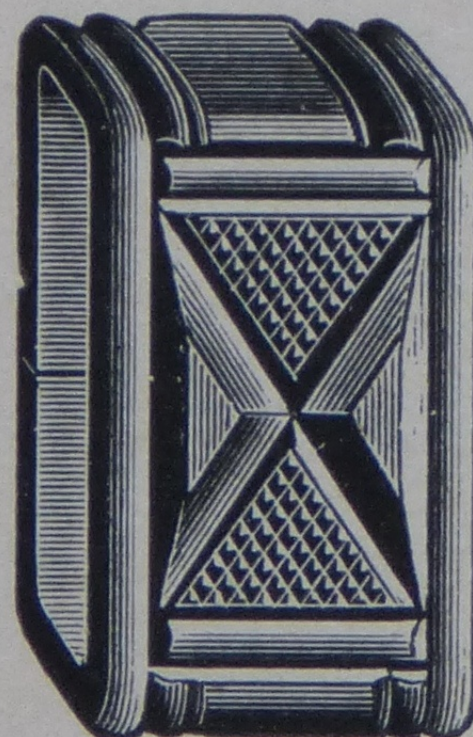
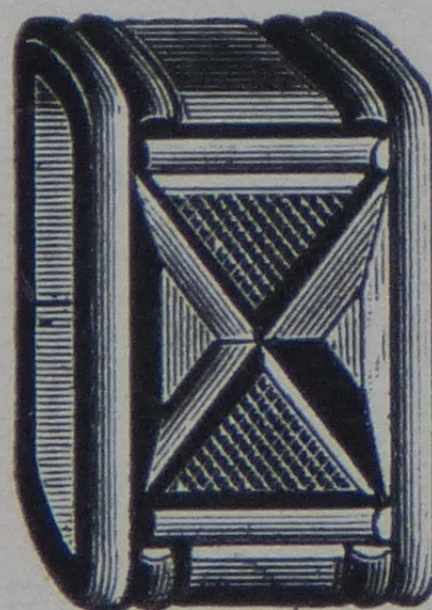
$1\frac{3}{8} \times \frac{7}{8}$

PRICE—Dies No. 1 or 2 Style.—Any size under $\frac{5}{8} \times 1$, **\$2.00.**

Any size over $\frac{5}{8} \times 1$, and not over $1 \times 1\frac{1}{2}$, **2.75.**

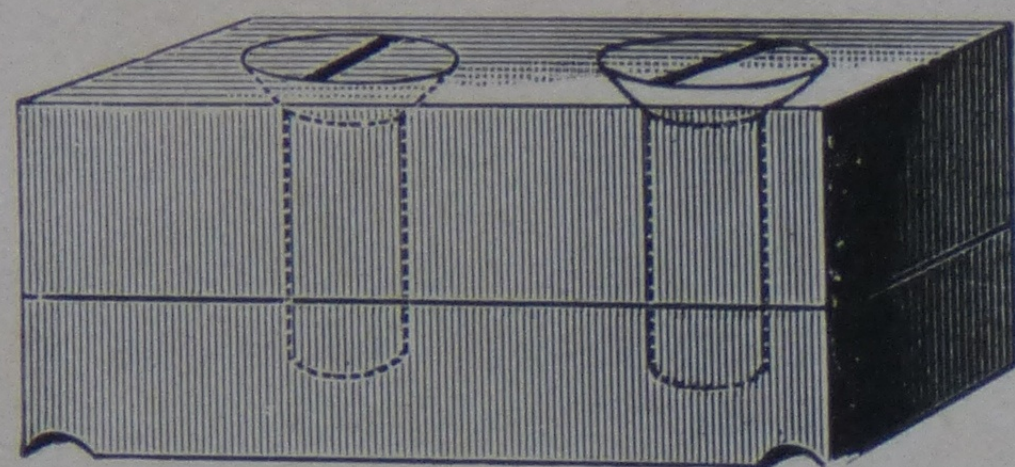
Steel Backed.

STYLE 2.



CUTS SHOW EXACT FIGURE OF THE DIES.

STEEL BACK DIES.



This small cut shows a Loop Die with a steel back. These backs we attach to any loop die. They are made $\frac{3}{4}$ inch thick and the width and length of the die, making a most desirable die. *It prevents all bending and warping of the die* as is the case of dies not backed. These steel backs *treble* the life of the die, and are especially desirable on *Cheek and Hame Tug Dies*.

Backing Dies, 3 inches and under. **50 Cents each.**
 Backing Dies, over three inches..... **65 Cents each.**

BRASS BOTTOM PLATES.

Cheek Loops, Shaft Tug and other small loops can be finished on the backs in the best possible manner with these Brass Bottom Plates.

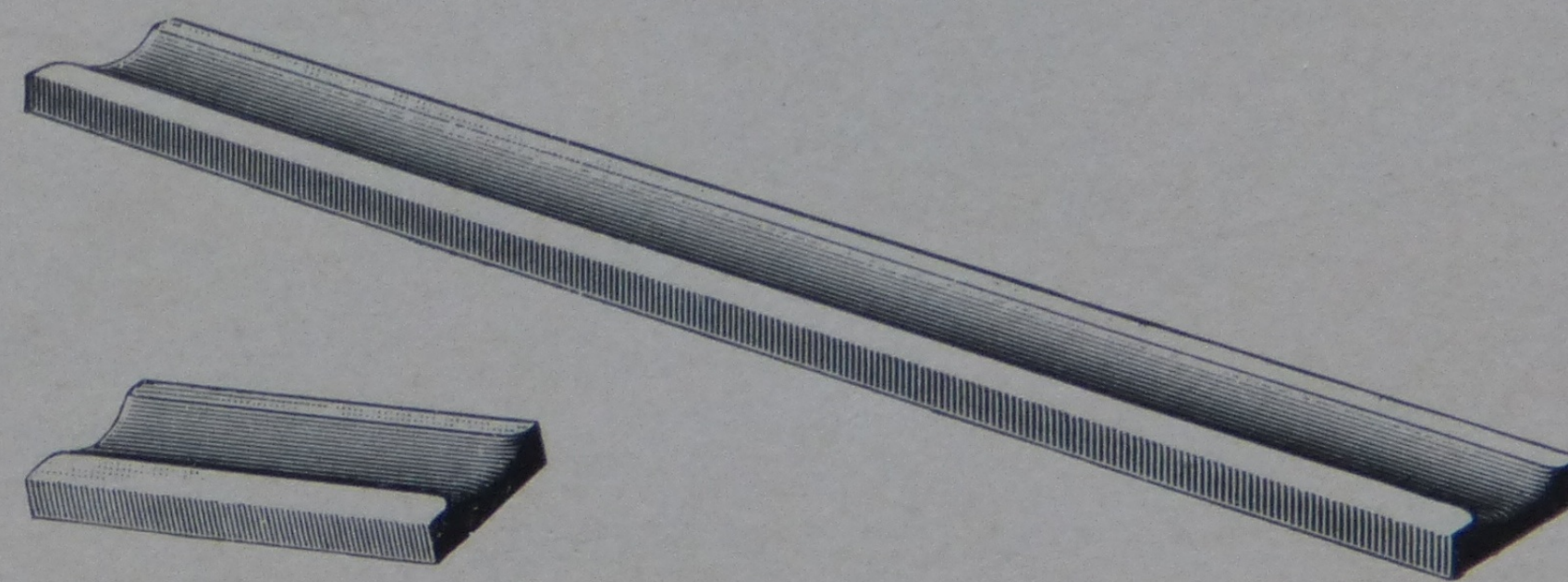
These plates may be placed in a groove in the bottom of a Cheek or Shaft Tug Loop Box.

They are so made that the back of the loop is slightly rounded and smoothly finished as the Loop Die finishes the face of the Loop.

Regular sizes are made for finished loops, $\frac{1}{2} \times 7\frac{1}{2}$, $\frac{5}{8} \times 7\frac{1}{2}$, $\frac{3}{4} \times 7\frac{1}{2}$, $1 \times 1\frac{1}{2}$, $\frac{3}{4} \times 2$, $\frac{7}{8} \times 1\frac{3}{8}$, $\frac{5}{8} \times 1\frac{3}{8}$. Other sizes to order. Order by inside measurement of the loop.

Plates are made to order that can be used with any Cheek or Shaft Tug Boxes.

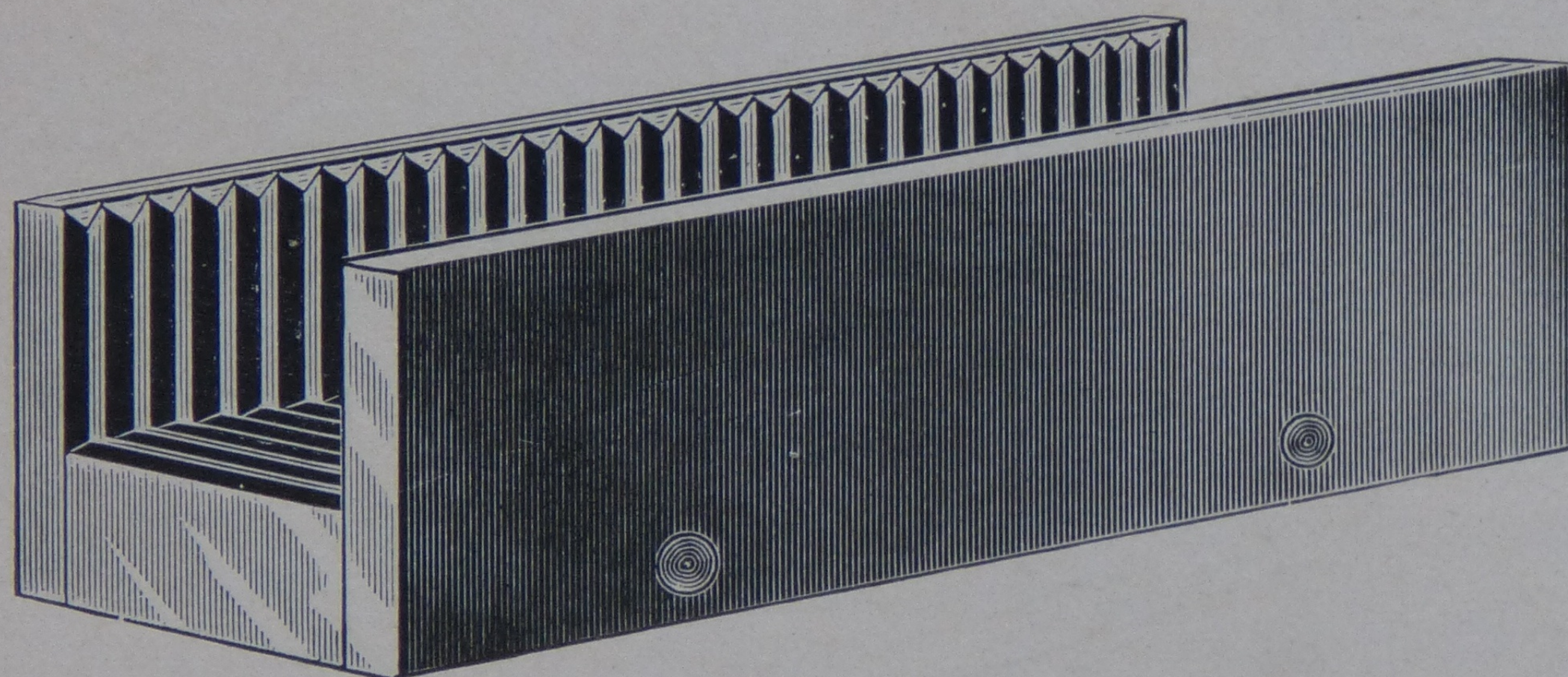
For Cheek Loops, \$1.25. For Small Loops, 75c.



Combination Side Plate and Loop Die Outfit.

MADE OF STEEL.

To be used in Hame Tug or Cheek Loop Box.



Length of Dies and Side Plates $4\frac{1}{2}$ inches, made in light or heavy flutes.

Will fit any width die same length. One pair Side Plates.

Any one width Die, $\frac{3}{8}$ to $1 \times 4\frac{1}{2}$ **\$2.50**

Any one width Die, 1 to $1\frac{1}{2} \times 4\frac{1}{2}$ **3.25**

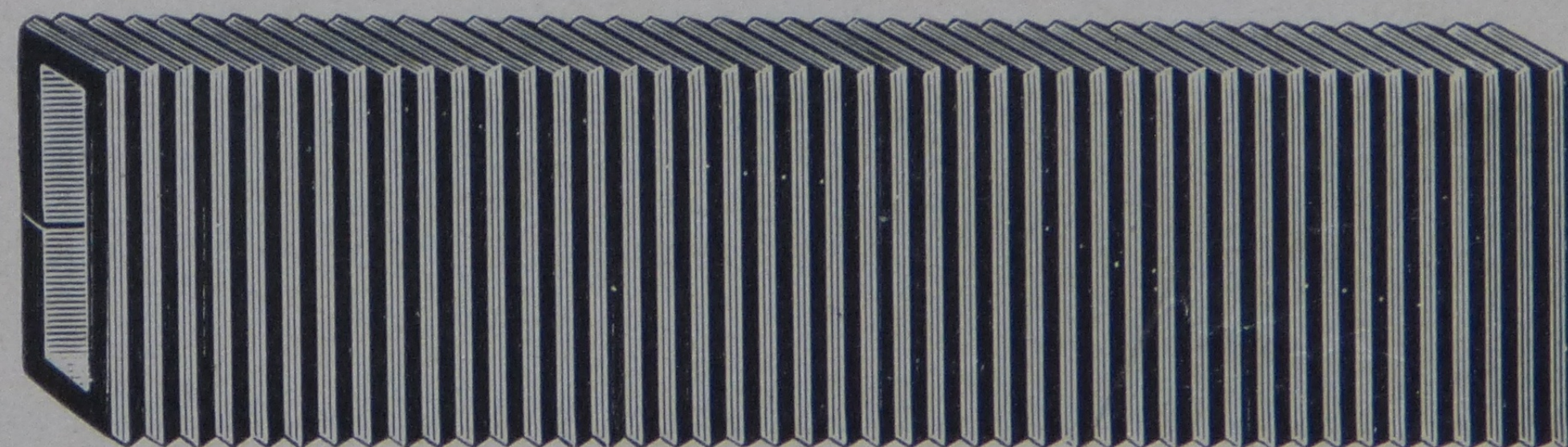
Side Crease Plates, fit to dies $4\frac{1}{2}$ **4.50**

With this outfit, loops can be pressed both top and sides *any width*.

The long loop can be cut into narrow loops any length desired.

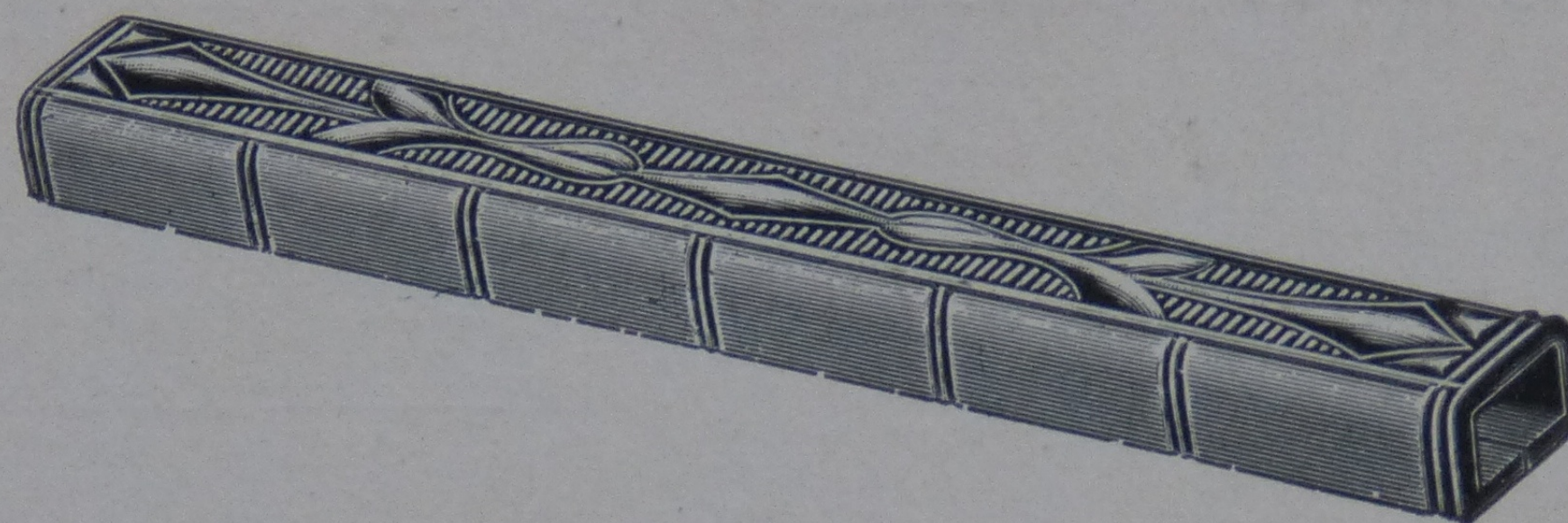
The outfit makes a first-class loop, stiff and firm—a nice slide loop.

MADE BY COMBINATION OUTFIT.



ANY LENGTH MADE TO ORDER.

Round Edge Side Crease Plate and Loop Die Outfit.



THIS cut shows a loop with the upper corners rounded, the sides of the loop, also the rounded corners creased. This is done at the same time that the face of the loop is pressed.

To produce this style loop, it is necessary to have special Side Crease Plates, with curved edges where they meet the corners on the Die, instead of square corners as shown on page 64, where the Die and Side Plates meet. The loop is pressed face down, resting on the Loop Die between the Side Plates, as shown on page 64. This leaves the back of the loop up when the loop is being pressed in the Side Plate and Loop Die Outfit.

Side Crease Plates with rounded edge, can be made any length desired, $7\frac{1}{2}$, $4\frac{1}{2}$, 2, $1\frac{3}{4}$ inches, etc. Any style of Loop Die can be made to order to fit these plates.

The Side Plate and Die Outfits are used in Cheek, Hame Tug, and small Loop Boxes.

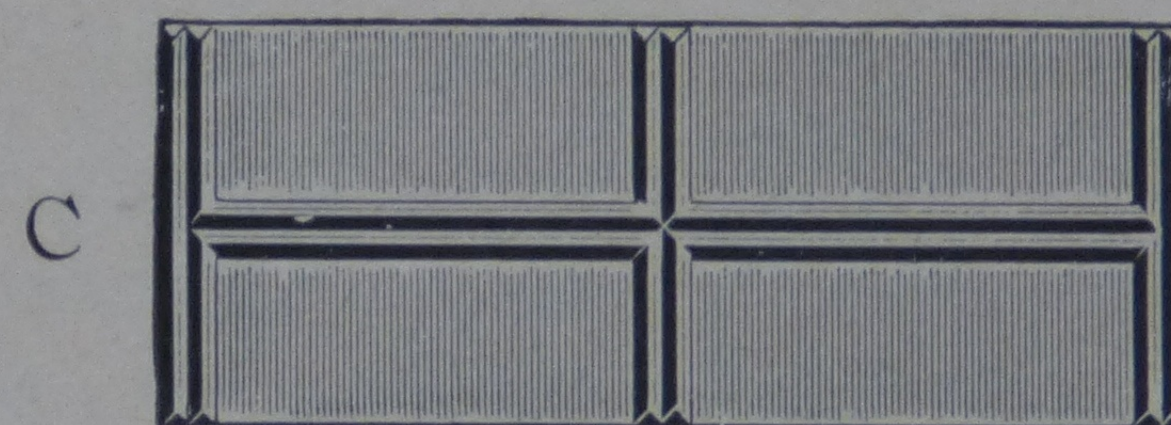
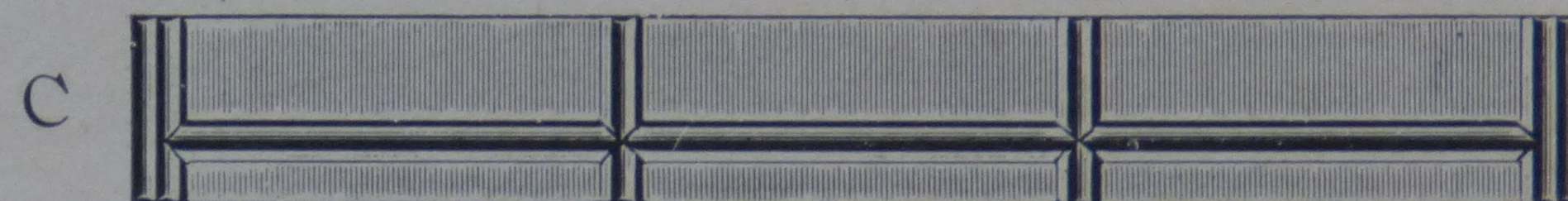
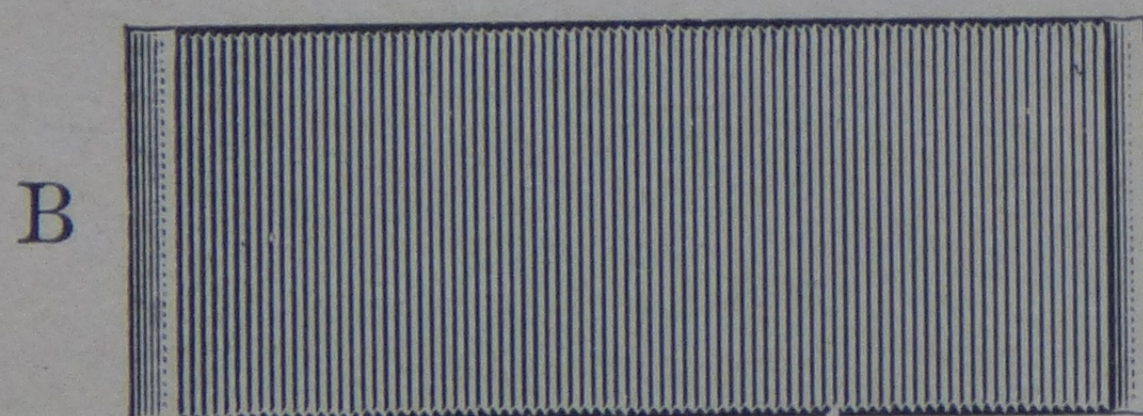
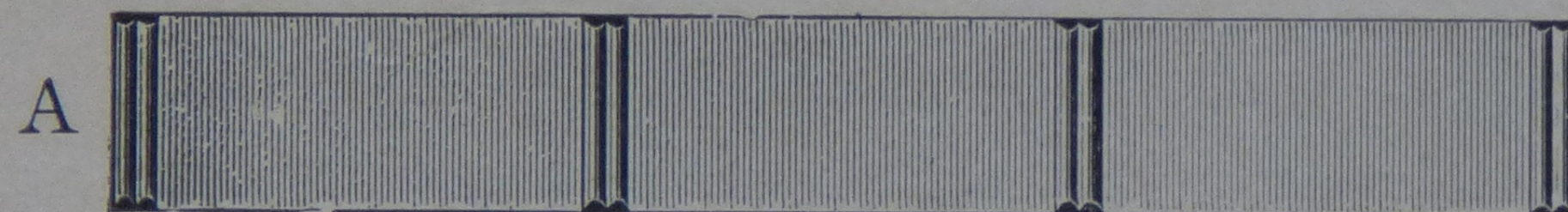
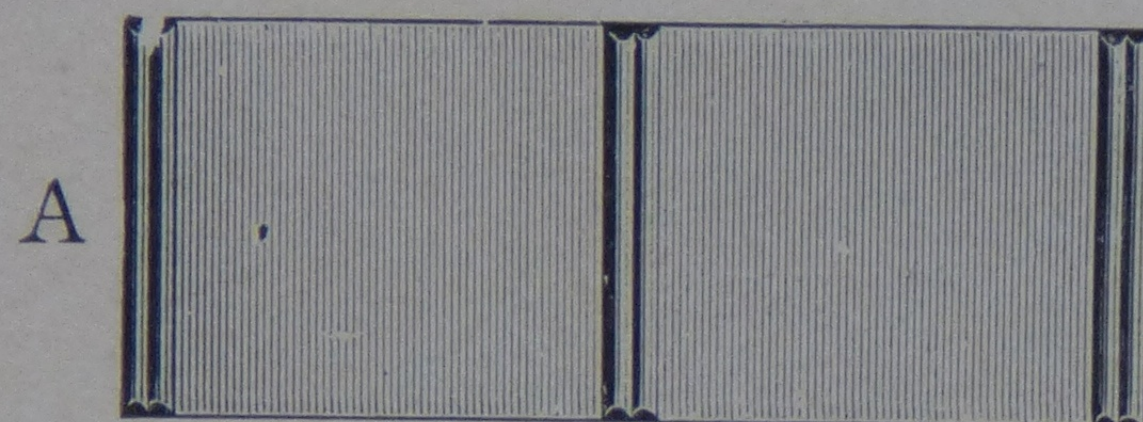
Round Edge Side Crease Plates, $7\frac{1}{2}$ and $4\frac{1}{2}$ inches long, (bronze metal) per pair..... **\$8.00**

Round Edge Side Crease Plates, 2 inches and under, (bronze metal) per pair..... **5.50**

Loop Dies, extra thickness, to be used with the Round Edge Side Plates, $\frac{1}{2}$ to 1 inch in width, $7\frac{1}{2}$ inches long, and $\frac{1}{2}$ to $1\frac{1}{4}$ inches wide by $4\frac{1}{2}$ inches long, each..... **4.00**

Loop Dies, extra thickness, to be used with the Round Edge Side Plates, $\frac{1}{2}$ to $1\frac{1}{2}$ inches wide by 2 inches or under in length, each..... **3.00**

SIDE CREASE PLATES.



Styles A and B are Steel.

Style C is Bronze Metal.

Style A, B or C, 7½ in. long, Cheeks.....**\$3.50**

“ “ “ 4½ in. long, Hame Tugs.... **3.50**

“ “ “ small, 1⅜, 1½, 1⅝, 1¾, 1⅞
and 2 inches in length.... **2.00**

CAN BE USED IN ANY BOX.

ANY STYLE OR SPECIAL LENGTH MADE TO ORDER.

LOOP STICKS.

ACCURATE.

HIGHLY FINISHED.



Straight.



Taper.

STEEL LOOP STICKS are made to exact sizes, and are highly polished.

TAPER WOOD LOOP STICKS are made of selected sugar maple, smoothly finished, and are the lowest priced sticks on the market.

Parties ordering **special** Sticks must give **thickness** desired at each end of Stick.

All Steel Loop Sticks have Pointed End and a Hole.

STEEL LOOP STICKS, STRAIGHT, POLISHED. FOR SINGLE STRAPS:

$\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1 inch.....	20	Cents each.	$\left\{ \begin{array}{l} \frac{3}{8} \text{ to } \frac{3}{4}, \frac{3}{16} \text{ inch thick} \\ \frac{7}{8} \text{ to } 2, \frac{1}{4} \text{ inch thick} \end{array} \right\}$	ANY thickness made to order at small advance.
$1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$ inches.....	25	"		
$1\frac{3}{4}$ and 2 inches.....	35	"		

STEEL TRACE STICKS, STRAIGHT, POLISHED:

$\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$ inches	35	Cents each.
$\frac{5}{8}$ inch thick (or any thickness to order).		

TAPERED STEEL STICKS, POLISHED:

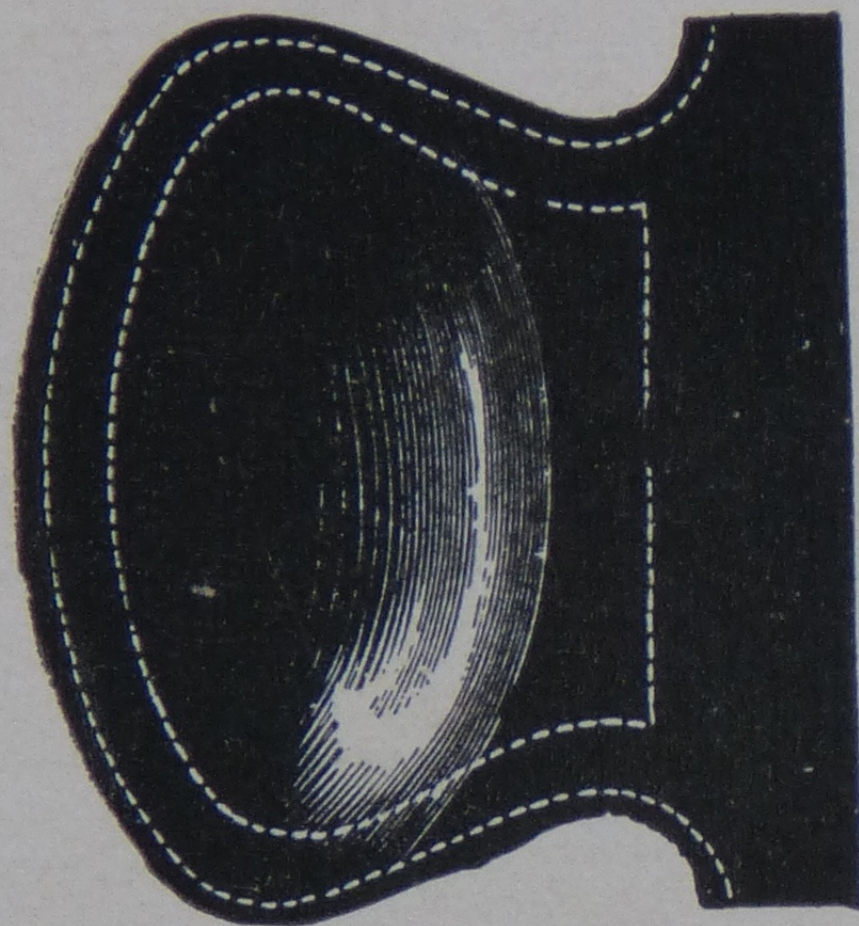
$\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1 inch.....	45	Cents each.
$1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$ inches	60	"

TAPERED WOOD LOOP STICKS FOR SINGLE STRAPS:

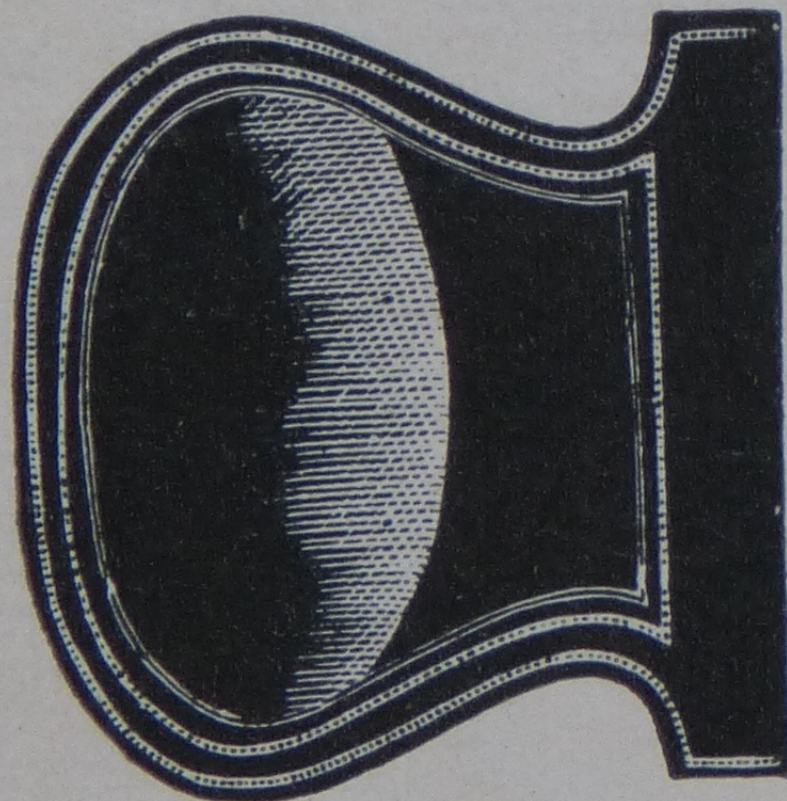
$\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$ inches	50	Cents per set.
--	-----------	----------------

TAPERED WOOD LOOP STICKS FOR TRACES:

1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$ inches	40	Cents per set.
---	-----------	----------------



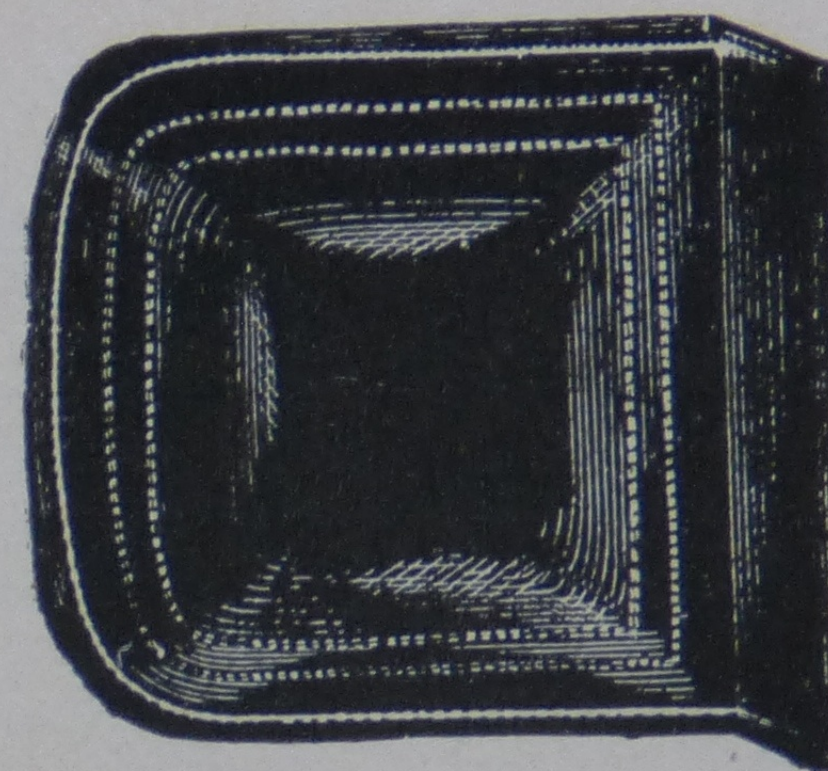
A



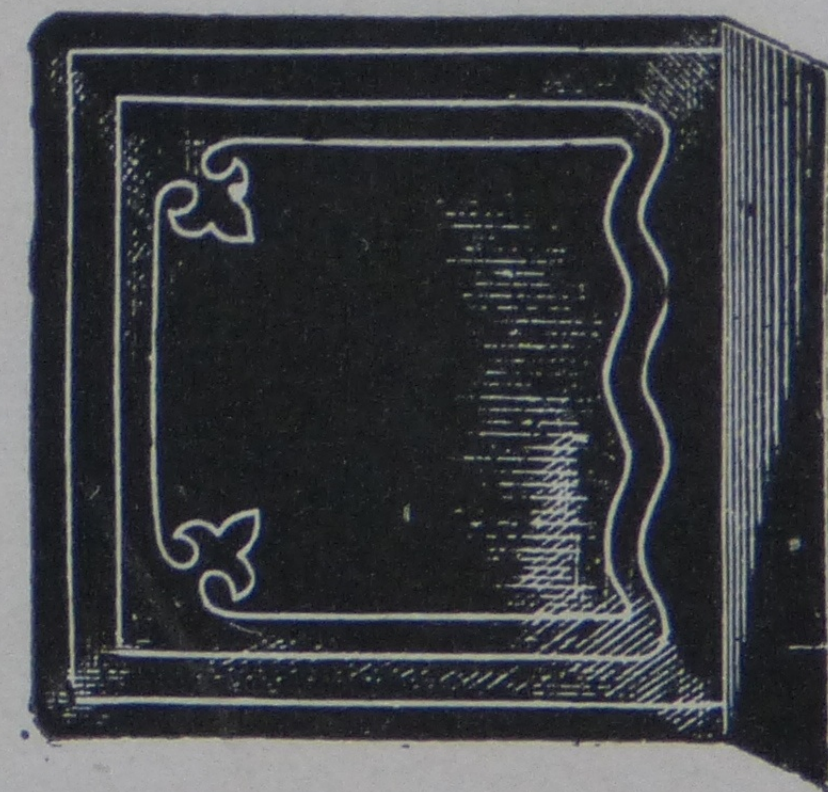
B



E



C



D

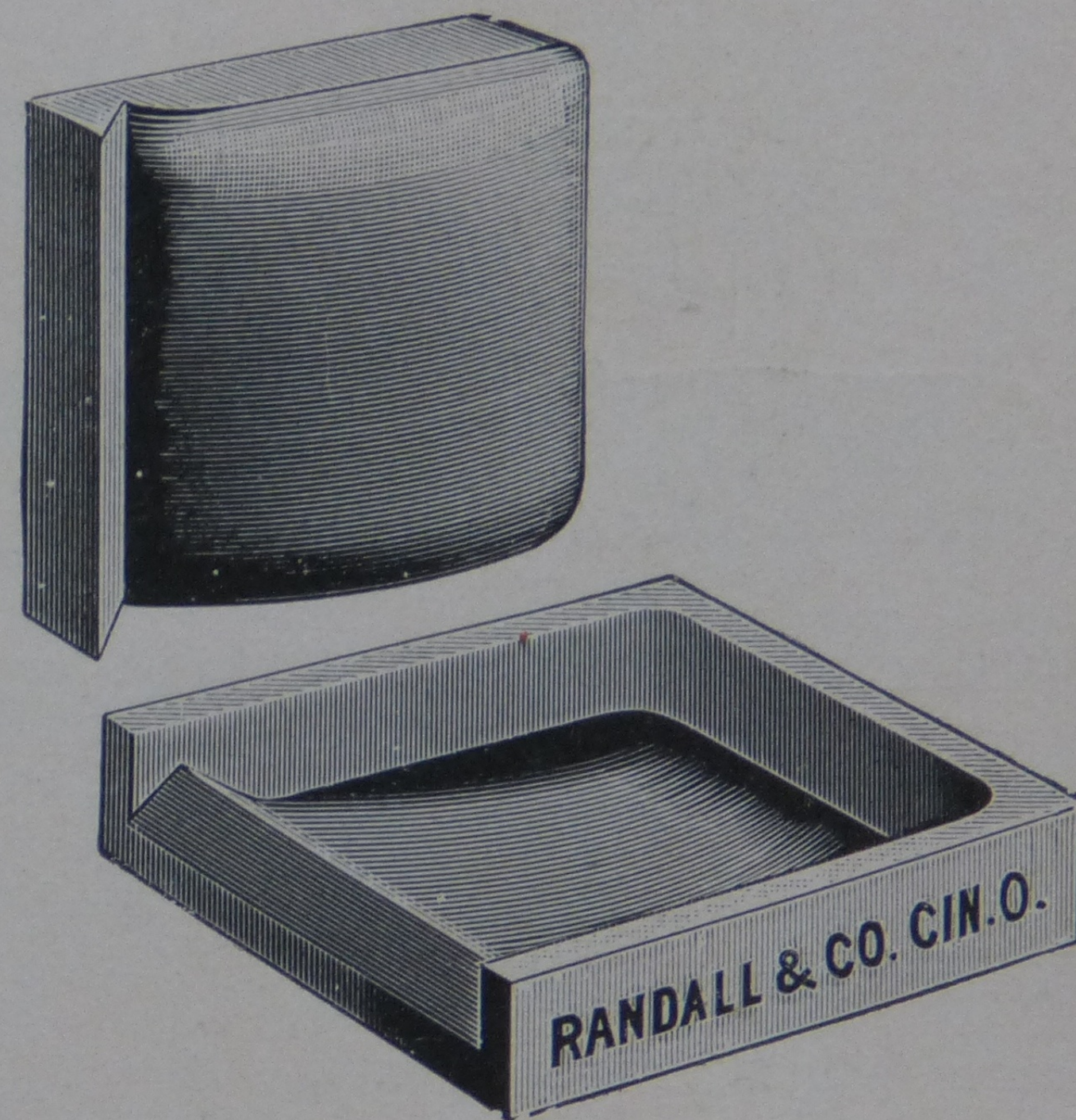
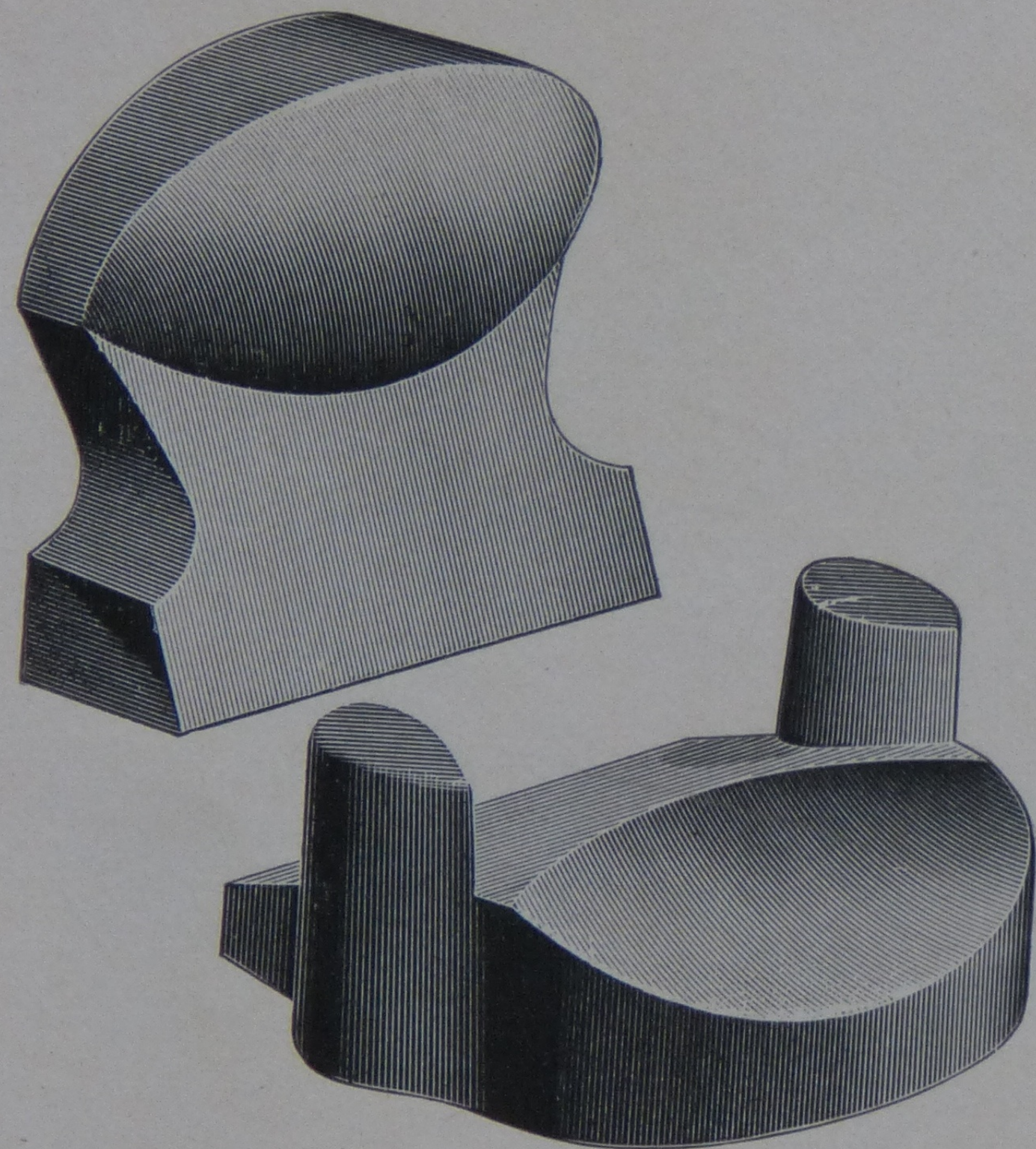
E—Mould made to press both right and left blinds.

BLIND MOULDS.

VERY STRONG.

HIGHLY
FINISHED.

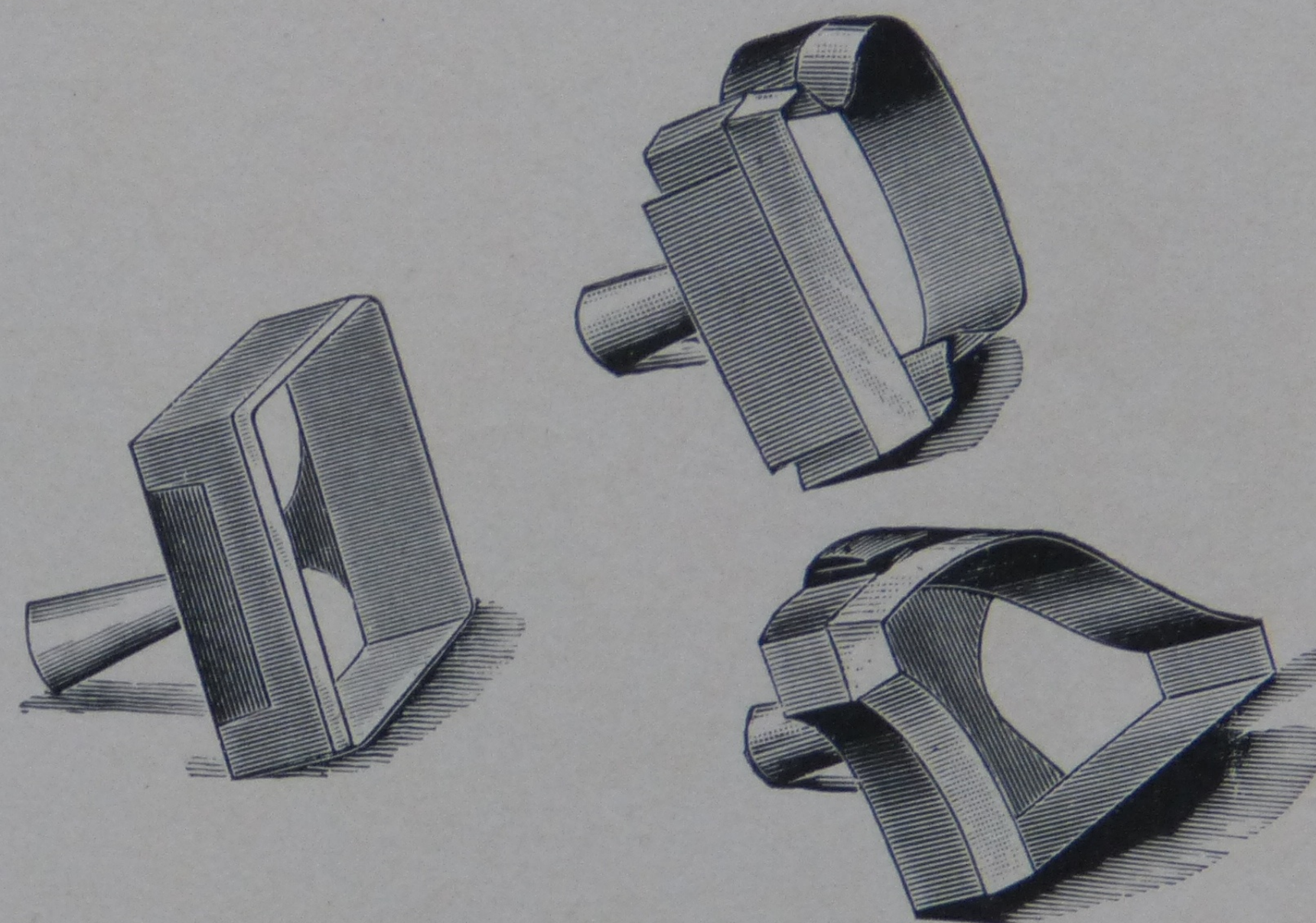
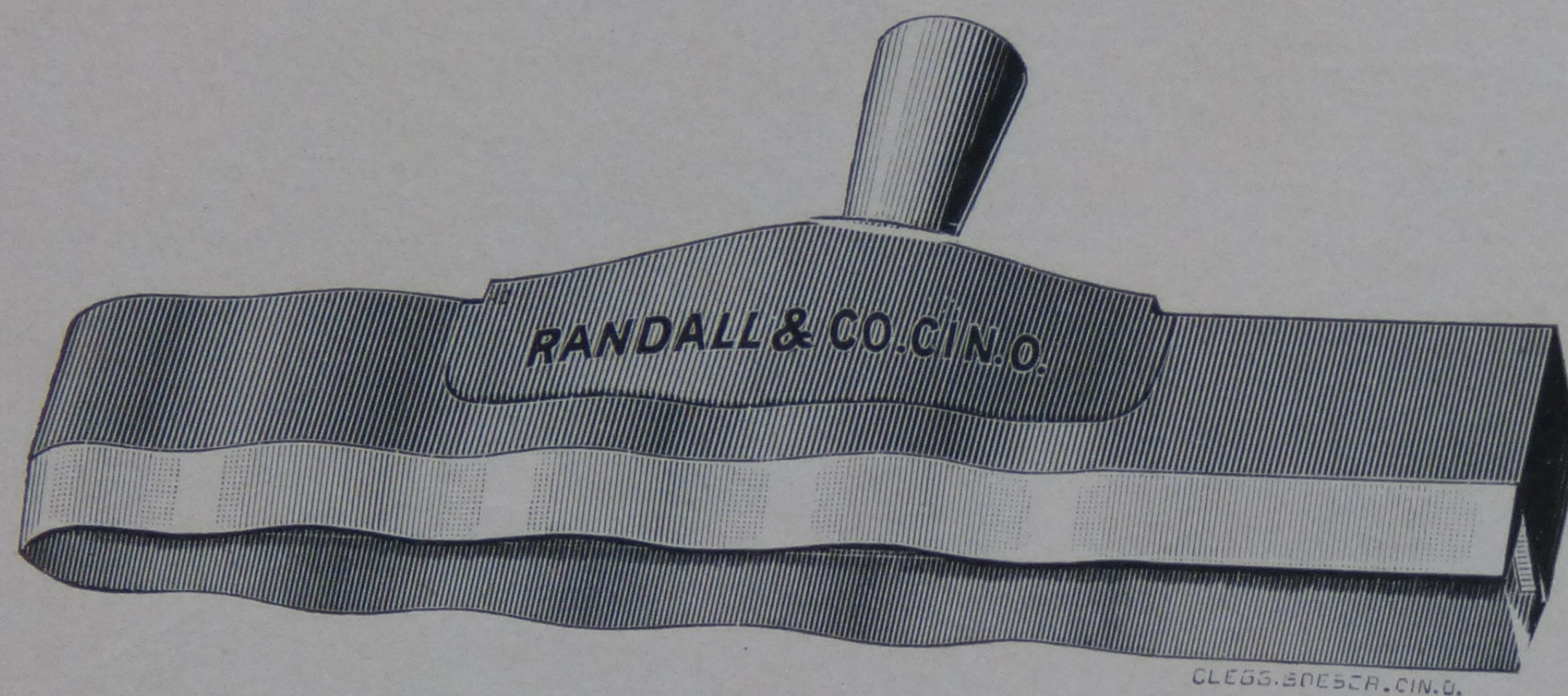
CAREFULLY
FORMED.



All our moulds are made heavy, with a high finish on their pressing and forming faces. Great care is taken to make the outline and the general shape of the blind as perfect as possible. Parties forwarding us sample blinds will have our lowest price for moulds promptly quoted on application. Any shape or size made to order. In ordering, please designate the style wanted by the letters with each cut, page 68; also give size. Blind Moulds, any size and shape to order.

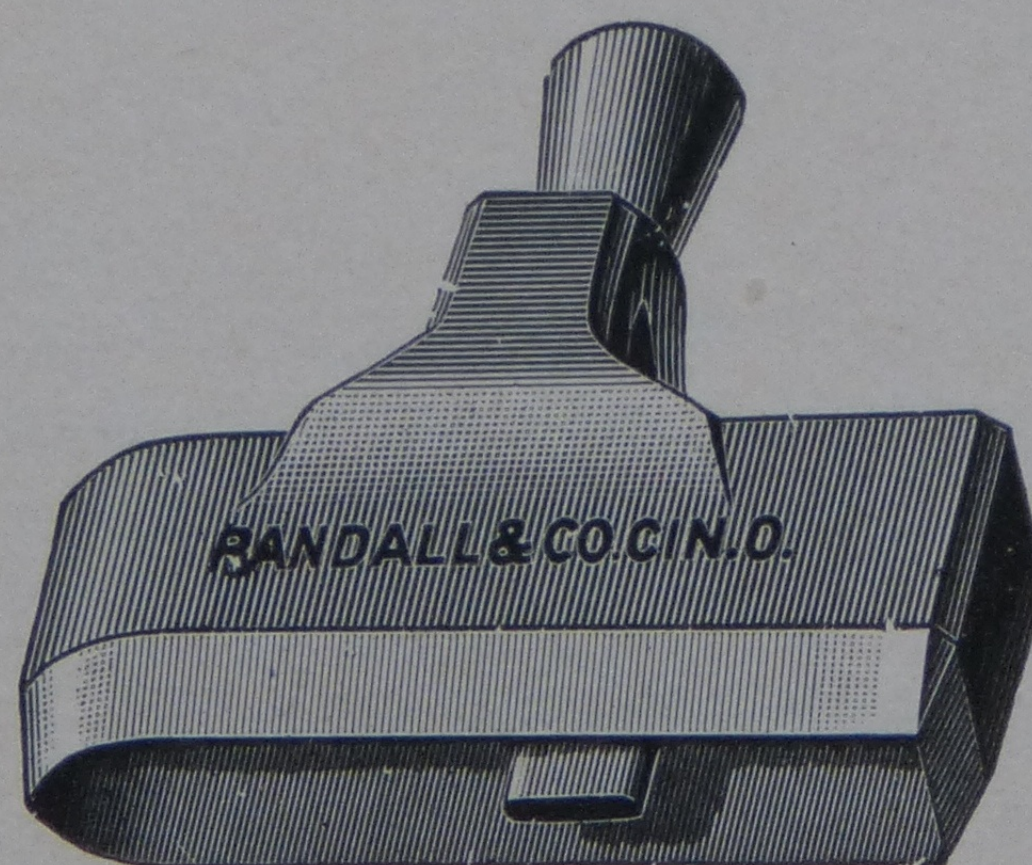
A, B, C, D Styles, page 68	\$4.50
E Style, presses right and left.....	7.50

CUTTING DIES.



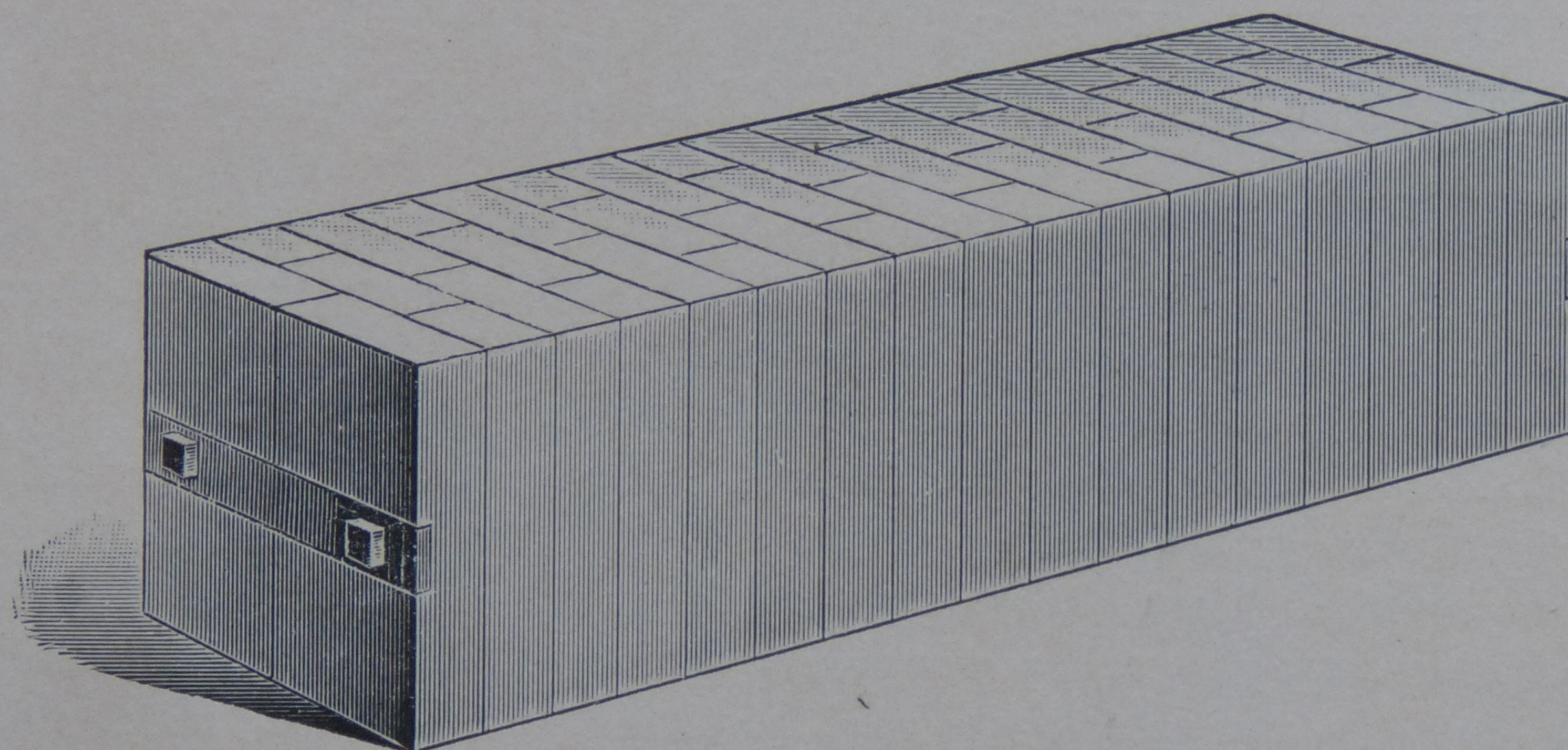
Cutting Dies of all kinds
Trace Points, Line Points,
Turnbacks, Chapes, Blinds,
Collar Pads, Cruppers, etc.
Prices varying according to
size and pattern. Quality
Guaranteed.

Send patterns and prices
will be cheerfully quoted.



BEST QUALITY.
CAREFULLY TEMPERED.
HIGHLY FINISHED.
GUARANTEED.

ROCK MAPLE CUTTING BLOCKS.



These Blocks are made of hard sugar maple, carefully jointed, securely bolted and are made to order to any length, width, and height desired.

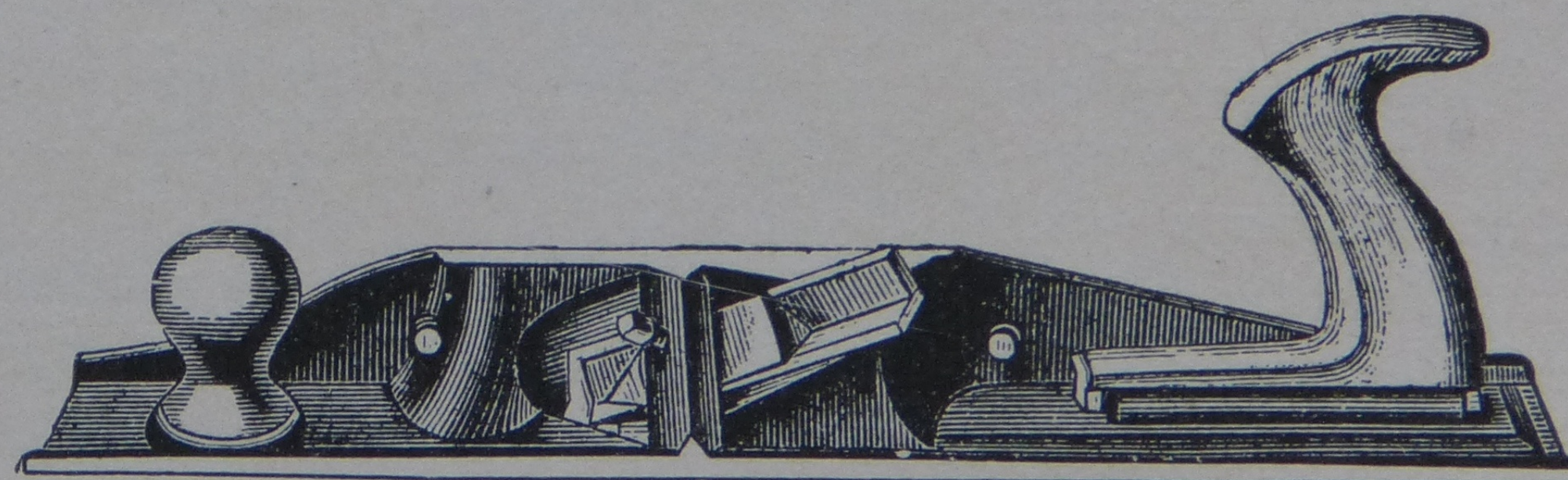
Prices quoted on application.

For Bench Use or Die Cutters.

BLOCK OR ROUTING PLANE.

This Plane is a first-class tool for smoothing surfaces of Cutting Blocks after they have become worn and need redressing.

It is a practical tool, and will save much time and annoyance over any other device used for this purpose. Price.....**\$3.00**



BRASS CREASING MOULDS.

OUR experience in making Brass Creasing Moulds has been extensive, and we can produce finely finished Moulds of the highest quality at the lowest cost possible.

They are made of the highest grade of bronze metal, finished on the bearing parts as smooth as g'ass, and planed on the top edges, sides and bottom, and are made so that the pressure is uniform on the entire face of the part which is raised and creased. Because of the high finish of the moulds the leather is very smoothly finished and polished. This finish can not be produced in moulds of poor finish and low quality.

The Moulds are made with sufficiently high sides, so the edges of the part being raised and creased are nicely finished, also to admit of using inside Dies as the stock is pressed.

Inside Dies or Plates are made to order only, and are always extra to the price quoted for the Mould. **The best** Inside Dies or plates are made by securing firmly together four or five thickness of firm saddle leather or sole leather cut to the shape of the Creasing Mould by the cutting die used for cutting the part for the Mould.

Moulds of any length, shape, or design made to order.

Parties furnishing us with leather patterns for Trace or Breeching Points, Turnbacks, Crown Layers, Crown Billets, Breeching or Breast Collar Layer, etc., must furnish us with patterns carefully raised and creased as they wish the Mould to finish them.

Our moulds are warranted best quality and finish.

Prices quoted on any pattern shown on pages 74 to 82, or on any pattern sent us.

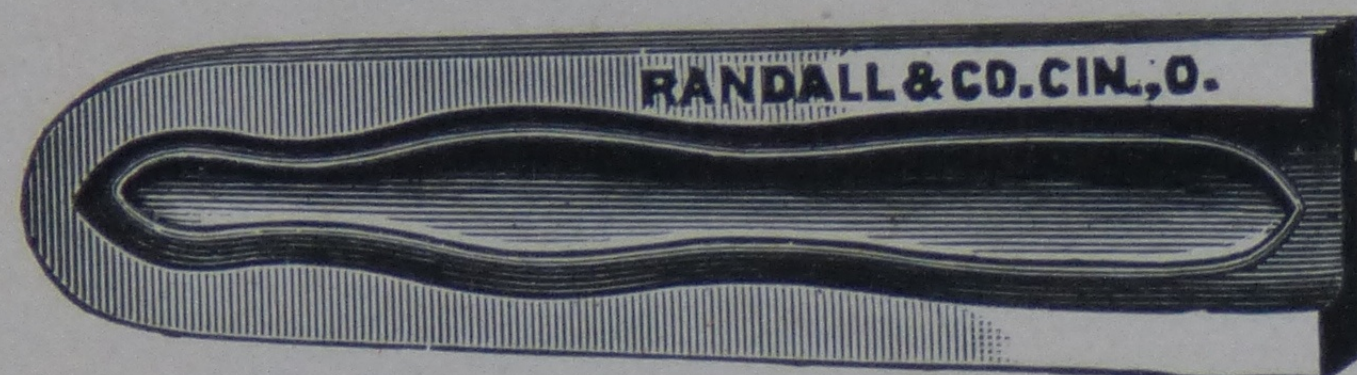
Designs are so varied that the prices for Moulds range from \$3.50 to \$7.50 for Moulds most frequently used about Harness.

With these Moulds a first-class job can be produced in from two to three minutes, where ten or fifteen minutes would be consumed in producing the job by hand.

Where any number of parts are produced in duplicate these Moulds soon pay for themselves.

BRASS CREASING MOULDS.

LINE POINTS.



TRACE AND BREECHING POINTS.



TURNBACKS.



HIGHEST QUALITY AND FINISH.

LINE POINTS.

TRACE POINTS.

BREECHING POINTS.

TURNBACKS.

BREECHING LAYERS.

BREAST COLLAR LAYERS.

CROWN LAYERS.

CROWN BILLETS.

NOSE BANDS.

LINE BILLETS.

OVER CHECKS.

SADDLE BEARERS.



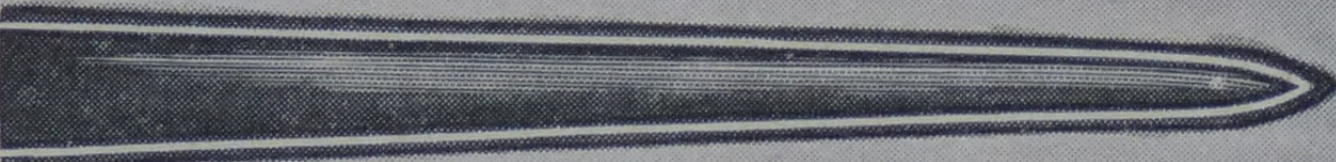

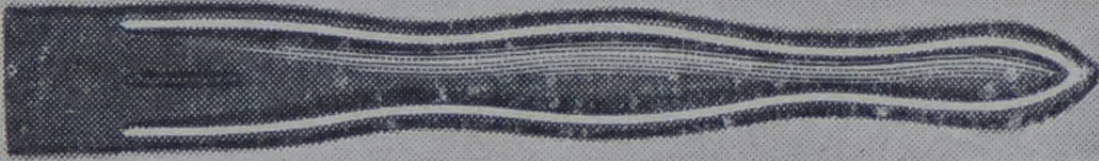




HAME TUGS.

WINKER STAYS.

&c., &c.

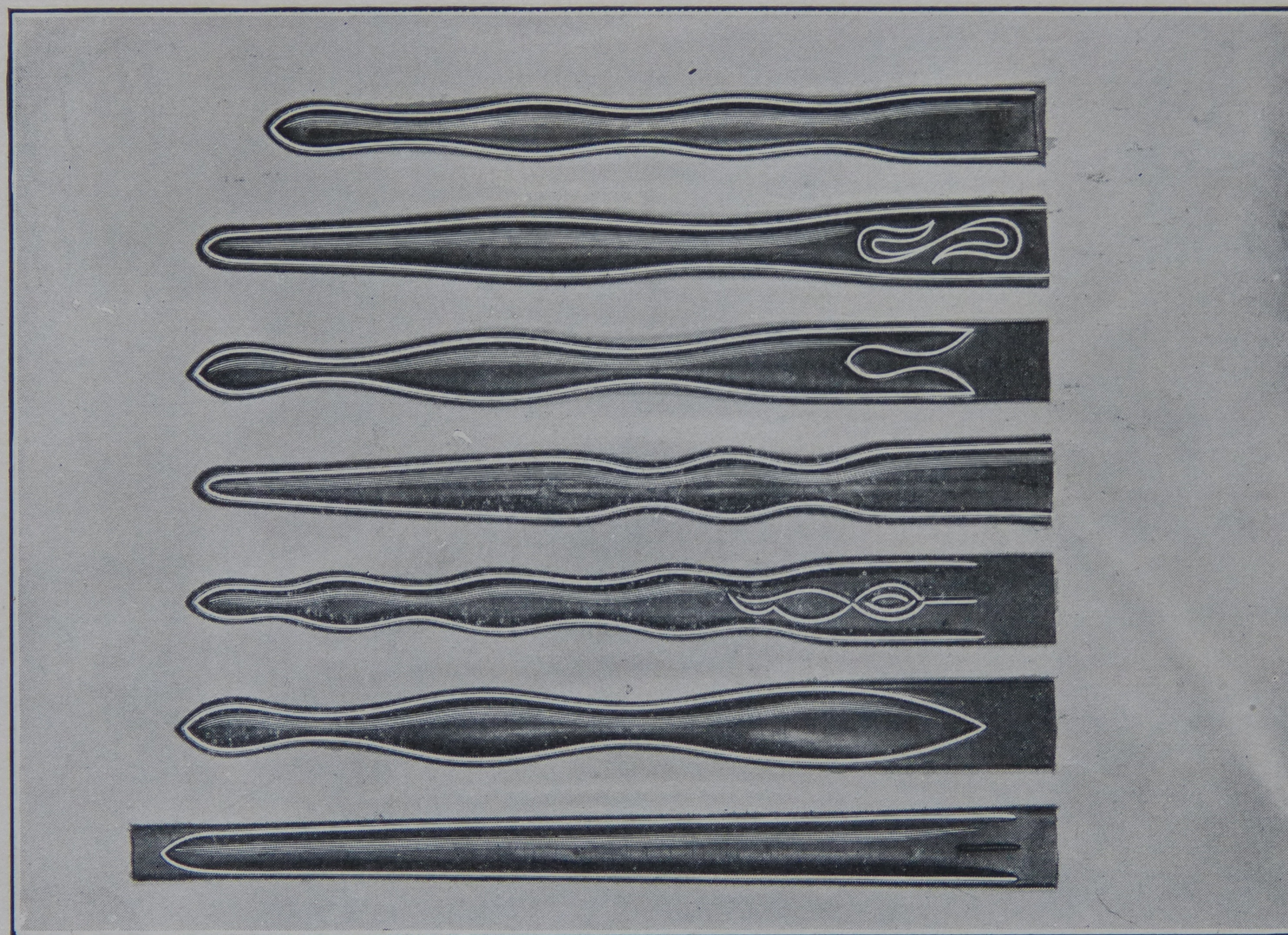
TO ANY PATTERN.

Brass Creasing Moulds—Line Points and Billets.

Size	No.		No.	Size
$\frac{7}{8} \times 8\frac{1}{2}$	1		10	1×4
$\frac{7}{8} \times 8$	2		11	$\frac{7}{8} \times 4\frac{3}{4}$
1×8	3		12	$1 \times 4\frac{3}{4}$
$\frac{7}{8} \times 7$	4		13	$\frac{7}{8} \times 5$
$\frac{7}{8} \times 6\frac{1}{2}$	5		14	$1 \times 5\frac{1}{2}$
$1 \times 6\frac{1}{2}$	6		15	1×6
$\frac{7}{8} \times 6$	7		16	1×6
$1 \times 5\frac{1}{2}$	8		17	$1\frac{1}{8} \times 6\frac{3}{4}$
$\frac{7}{8} \times 5\frac{1}{2}$	9		18	1×7

Moulds made from these patterns or any style to order.

Brass Creasing Moulds—Trace and Breeching Points.

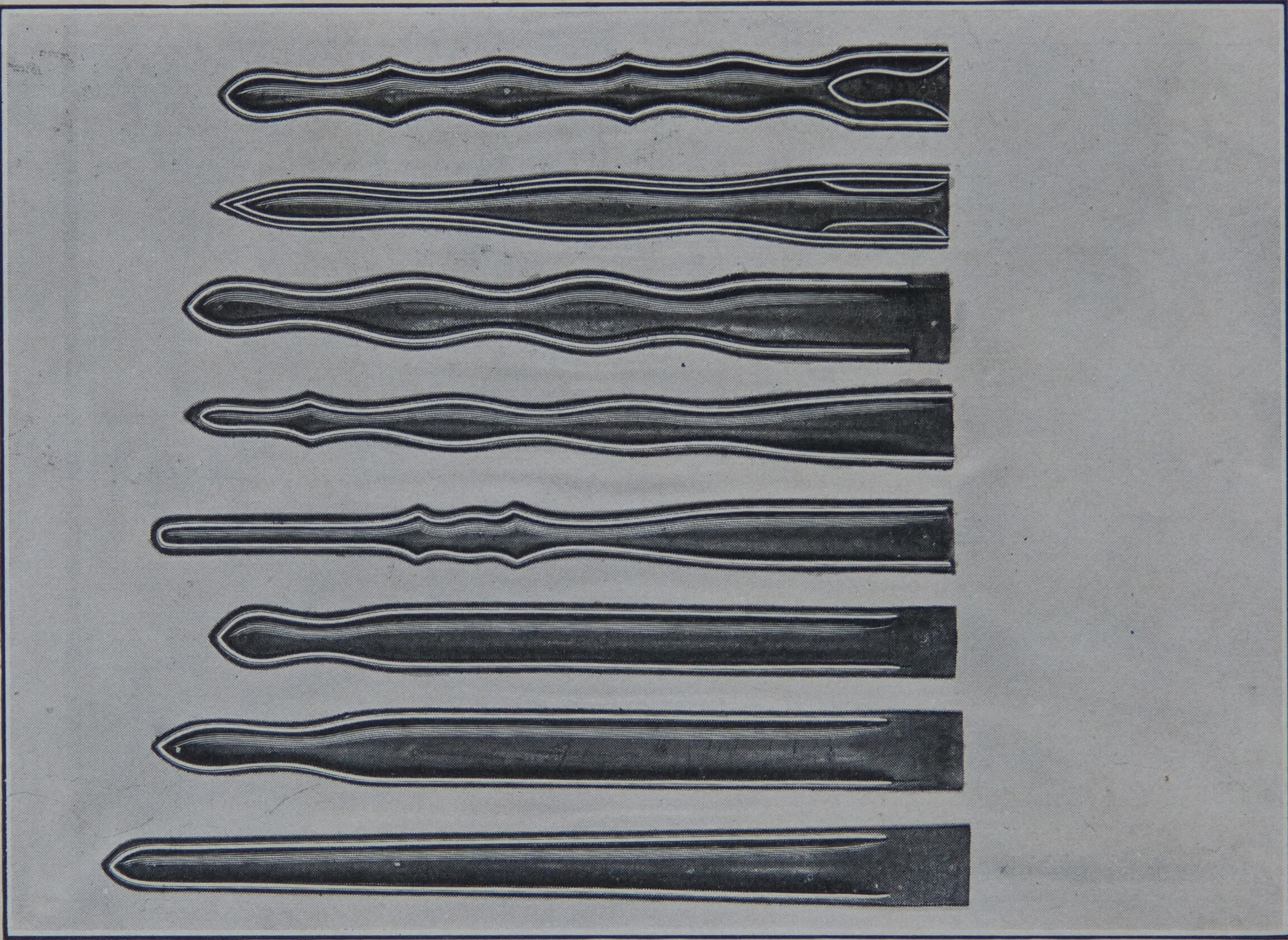


No.	Size
19.....	$1\frac{1}{8} \times 11$
20	$1\frac{1}{4} \times 12$
21.....	$1\frac{1}{8} \times 12$
22.....	$1\frac{1}{8} \times 12$
23.....	$1\frac{1}{4} \times 12$
24.....	$1\frac{1}{2} \times 12$
25.....	$1\frac{1}{8} \times 12\frac{1}{2}$

Moulds made from these patterns or any style to order.

Brass Creasing Moulds—Trace and Breeching Points.

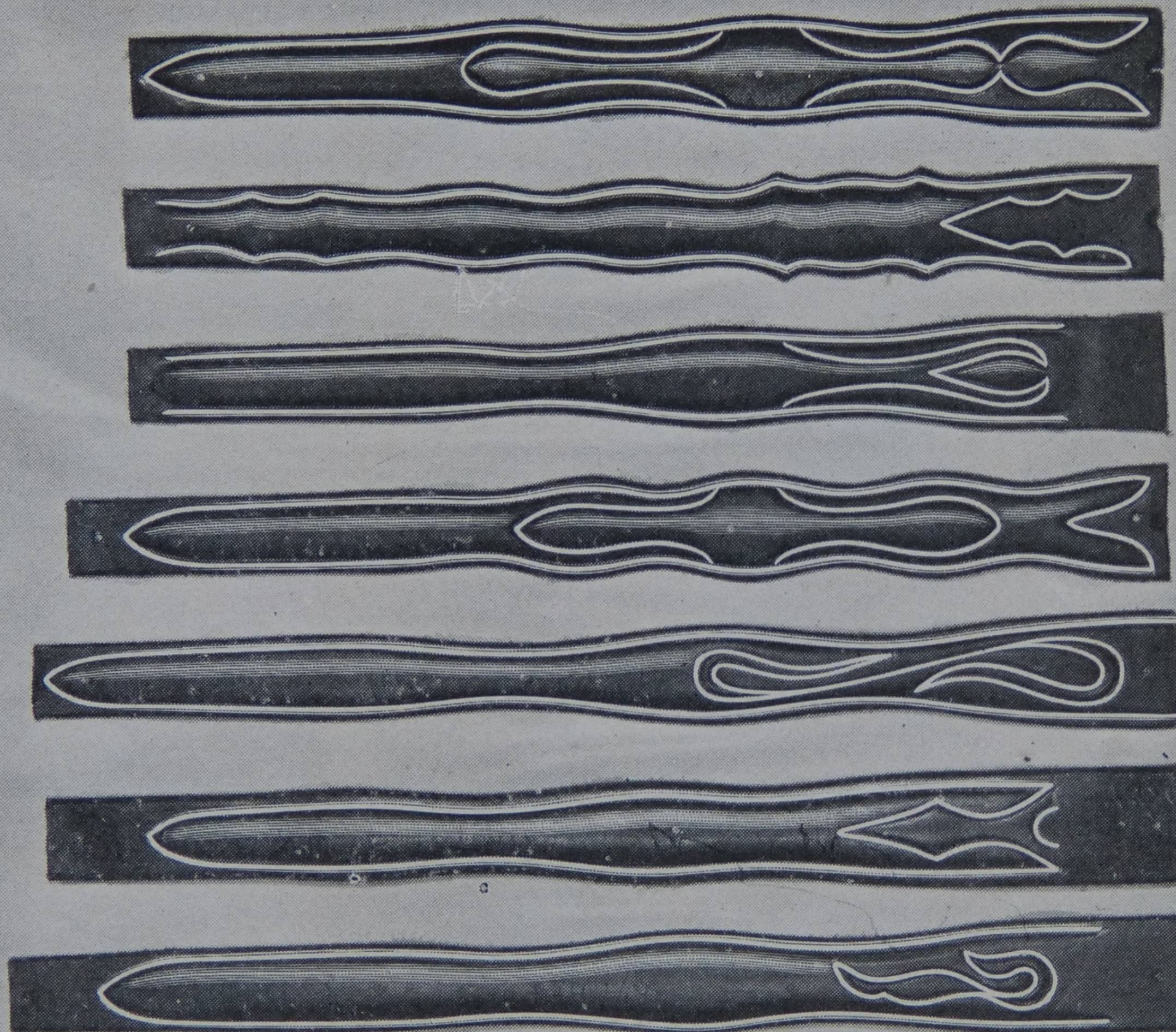
Size	No.
$1\frac{1}{4} \times 10\frac{1}{4}$	26
$1\frac{1}{8} \times 10\frac{1}{4}$	27
$1\frac{1}{4} \times 10\frac{3}{4}$	28
$1\frac{1}{8} \times 10\frac{3}{4}$	29
$1 \times 11\frac{1}{4}$	30
$1 \times 10\frac{1}{2}$	31
$1\frac{1}{8} \times 11\frac{1}{2}$	32
$1\frac{1}{8} \times 12$	33



Moulds made from these patterns or any style to order.

Brass Creasing Moulds—Turnbacks.

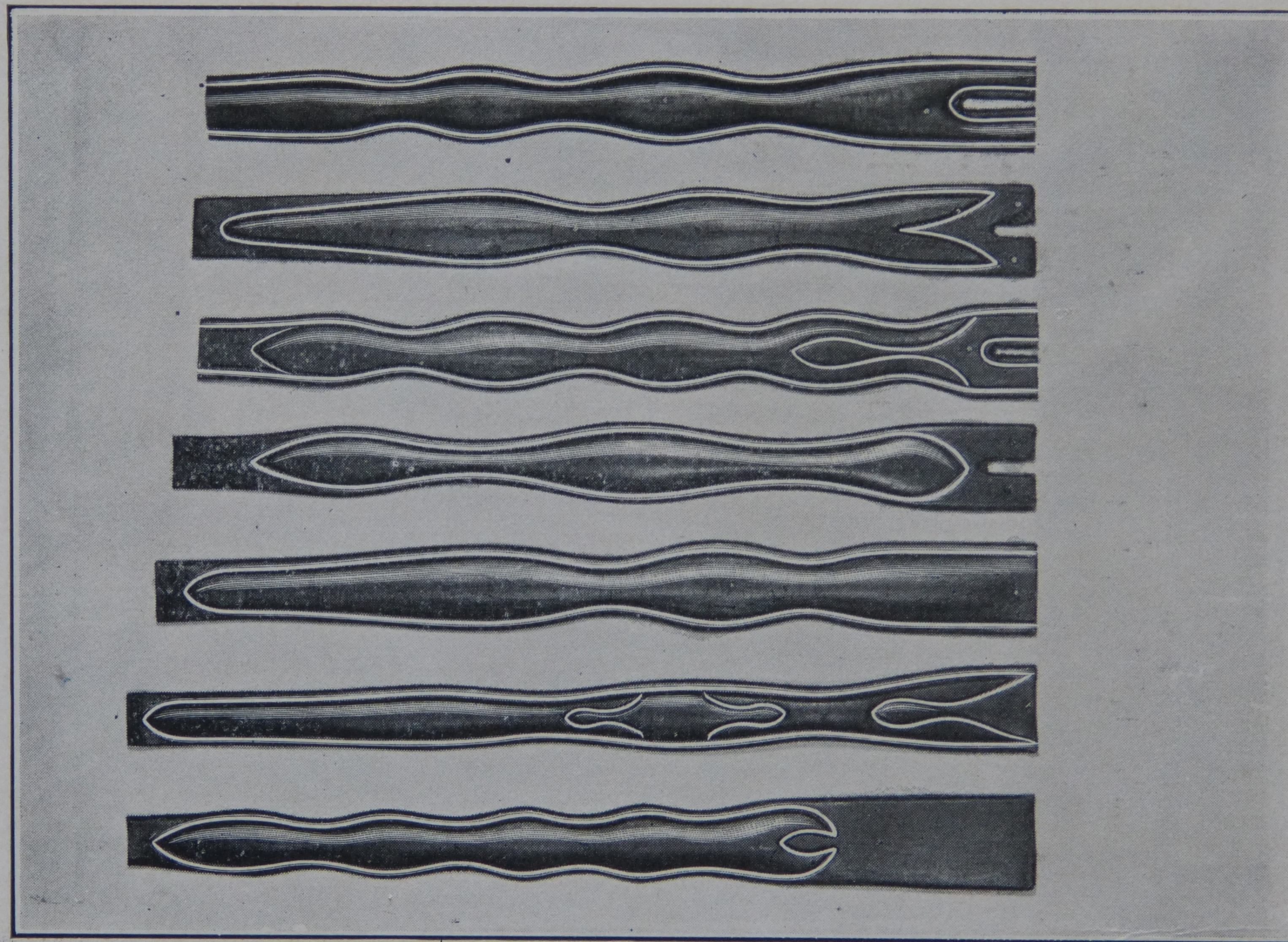
No.	Size
34.....	$1\frac{3}{8} \times 11$
35.....	$1\frac{1}{4} \times 11$
36.....	$1\frac{1}{4} \times 11$
37.....	$1\frac{1}{4} \times 12$
38.....	$1\frac{1}{4} \times 12\frac{1}{2}$
39.....	$1\frac{1}{4} \times 12\frac{1}{2}$
40.....	$1\frac{1}{4} \times 12\frac{3}{4}$



Moulds made from these patterns or any style to order.

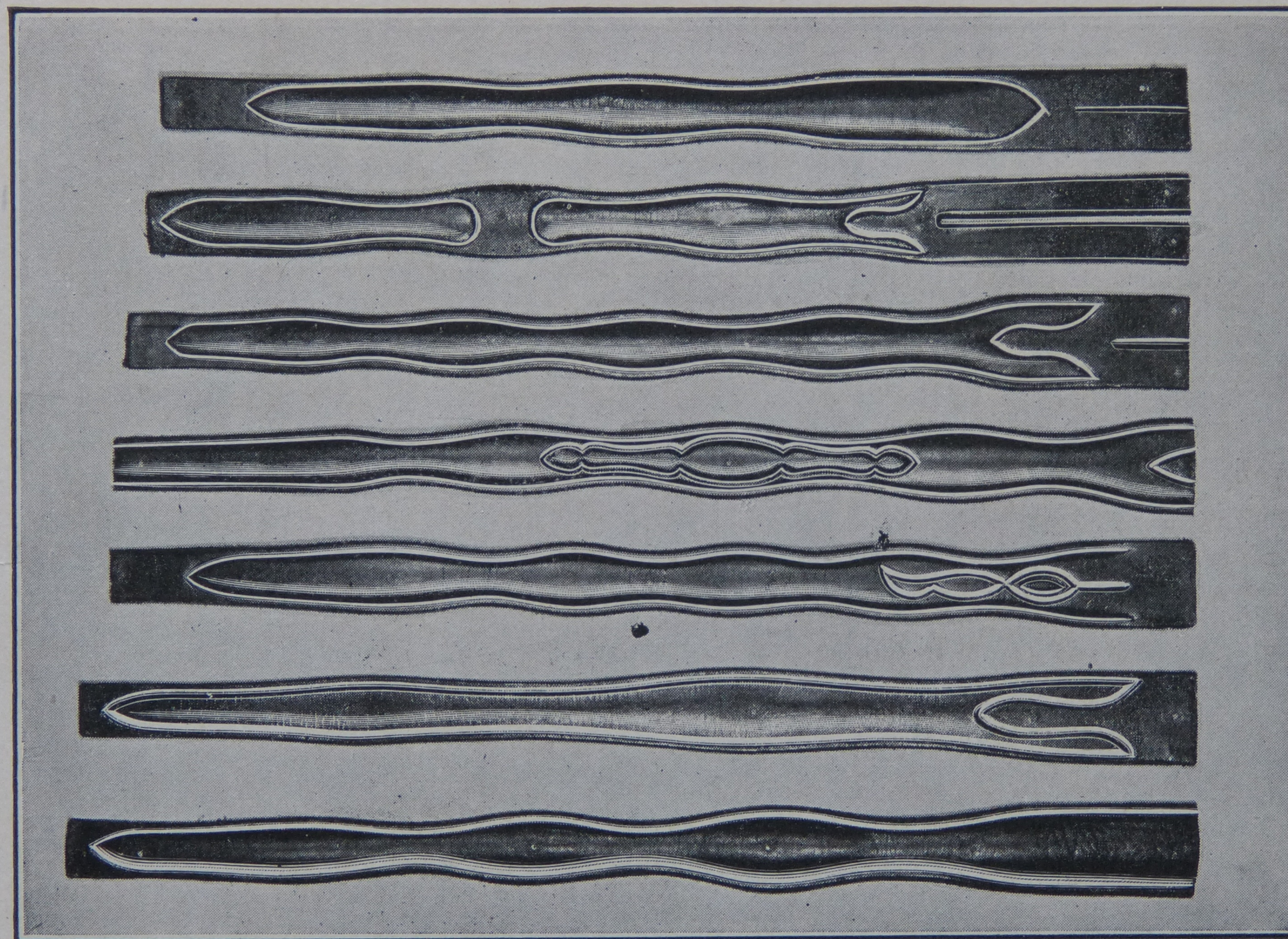
Brass Creasing Moulds—Turnbacks.

Size	No.
$1\frac{3}{8} \times 11\frac{1}{2}$	41
$1\frac{1}{4} \times 12$	42
$1\frac{3}{8} \times 12$	43
$1\frac{1}{4} \times 12$	44
$1\frac{1}{4} \times 12\frac{1}{4}$	45
$1\frac{1}{4} \times 12\frac{1}{2}$	46
$1\frac{1}{4} \times 12\frac{1}{2}$	47



Moulds made from these patterns or any style to order.

Brass Creasing Moulds—Turnbacks.

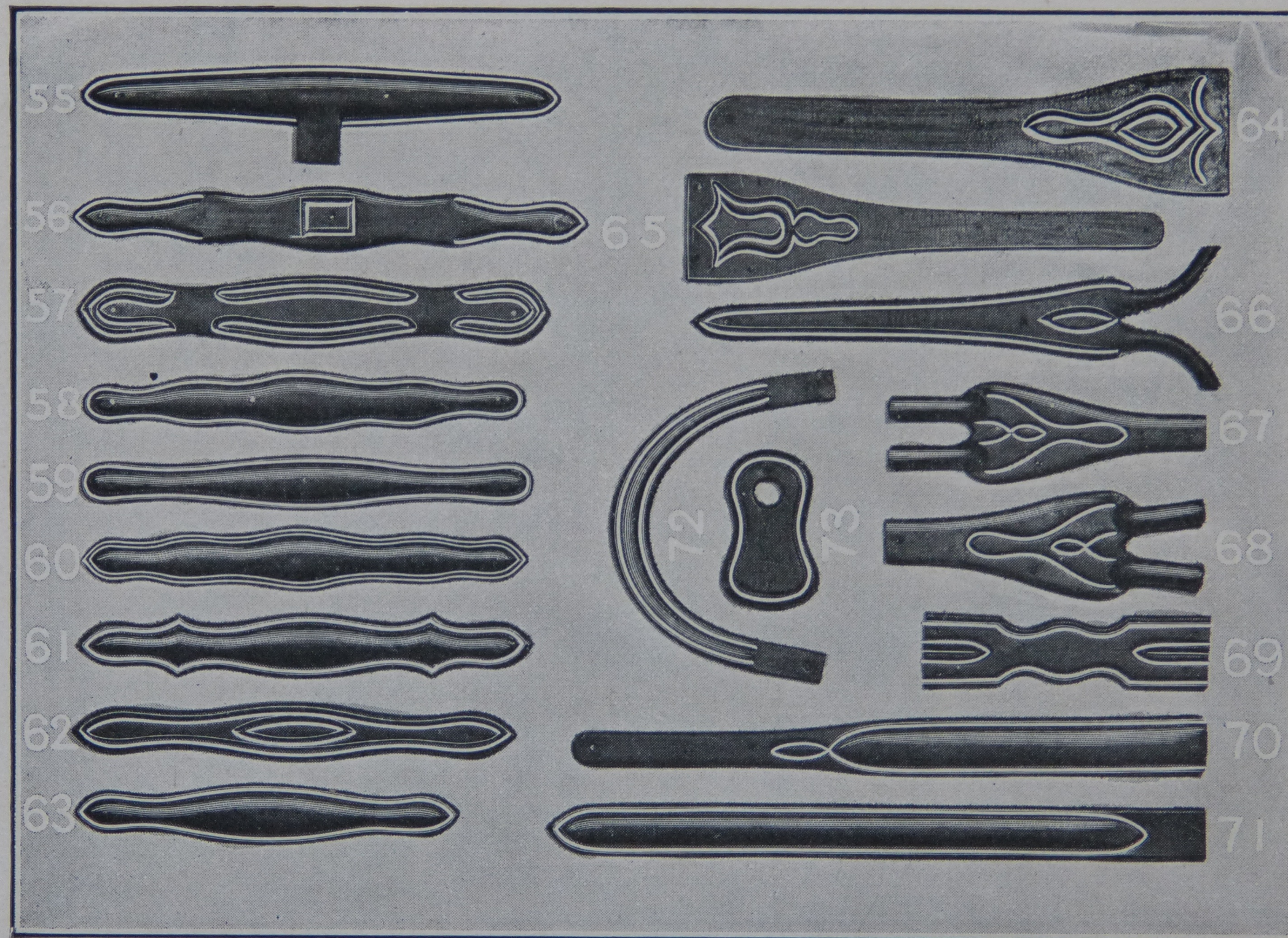


No.	Size
48.....	$1\frac{1}{4} \times 14\frac{1}{2}$
49.....	$1\frac{1}{4} \times 14\frac{1}{2}$
50	$1\frac{1}{4} \times 15$
51.....	$1\frac{1}{4} \times 15$
52.....	$1\frac{1}{4} \times 15$
53.....	$1\frac{1}{4} \times 15\frac{1}{2}$
54.....	$1\frac{1}{4} \times 16$

Moulds made from these patterns or any style to order.

Brass Creasing Moulds—Crown Layers. Winker Stays, &c.

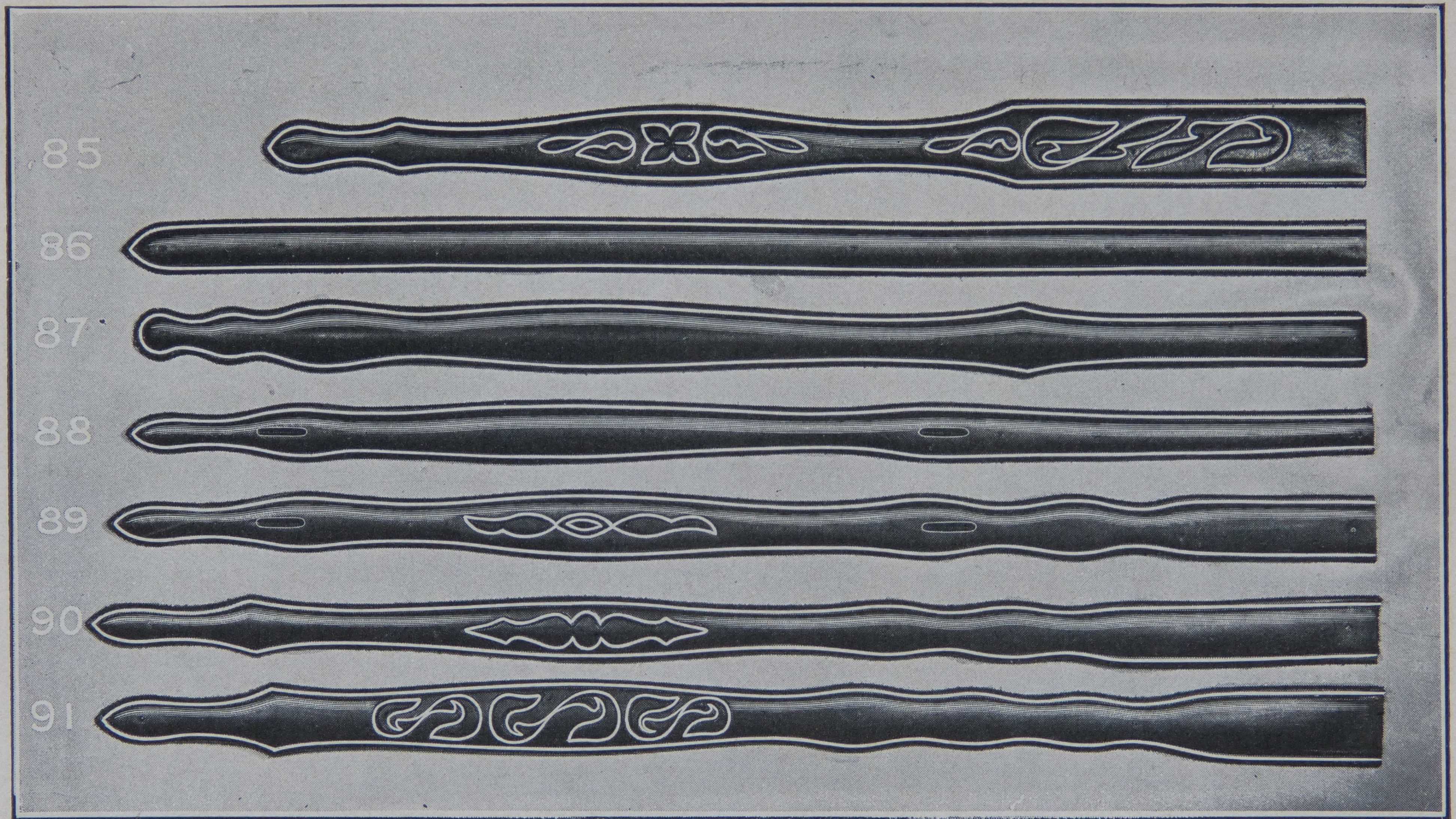
No.	Size
55.....	$\frac{7}{8} \times 6\frac{3}{4}$
56.....	$\frac{7}{8} \times 7\frac{1}{4}$
57.....	$1 \times 6\frac{3}{4}$
58.....	$\frac{7}{8} \times 6\frac{1}{2}$
59.....	$\frac{3}{4} \times 6\frac{1}{2}$
60.....	$\frac{7}{8} \times 6\frac{1}{4}$
61.....	$1 \times 6\frac{1}{2}$
62.....	$\frac{7}{8} \times 6\frac{1}{4}$
63.....	$\frac{7}{8} \times 5\frac{1}{2}$
64.....	$\frac{3}{4} \times 1\frac{3}{4} \times 8\frac{1}{2}$
65.....	$\frac{1}{2} \times 1\frac{1}{2} \times 6\frac{3}{4}$
66.....	$\frac{1}{2} \times 1\frac{1}{8} \times 6$
67.....	$\frac{1}{2} \times 1\frac{1}{2} \times 4\frac{1}{2}$
68.....	$\frac{5}{8} \times 1\frac{5}{8} \times 4\frac{1}{2}$
69.....	1×4
70.....	$\frac{1}{2} \times \frac{7}{8} \times 9$
71.....	$\frac{3}{4} \times 9\frac{1}{4}$
72.....	$\frac{1}{2} \times 8$ Creased or plain
73.....	$1\frac{1}{8} \times 1\frac{3}{8} \times 2\frac{1}{4}$



Moulds made from patterns or any style to order.

Brass Creasing Moulds—Pad Bearers.

81



No. 85.....size $1\frac{3}{8} \times 17\frac{1}{2}$
 No. 90.....size $1 \times 20\frac{1}{2}$

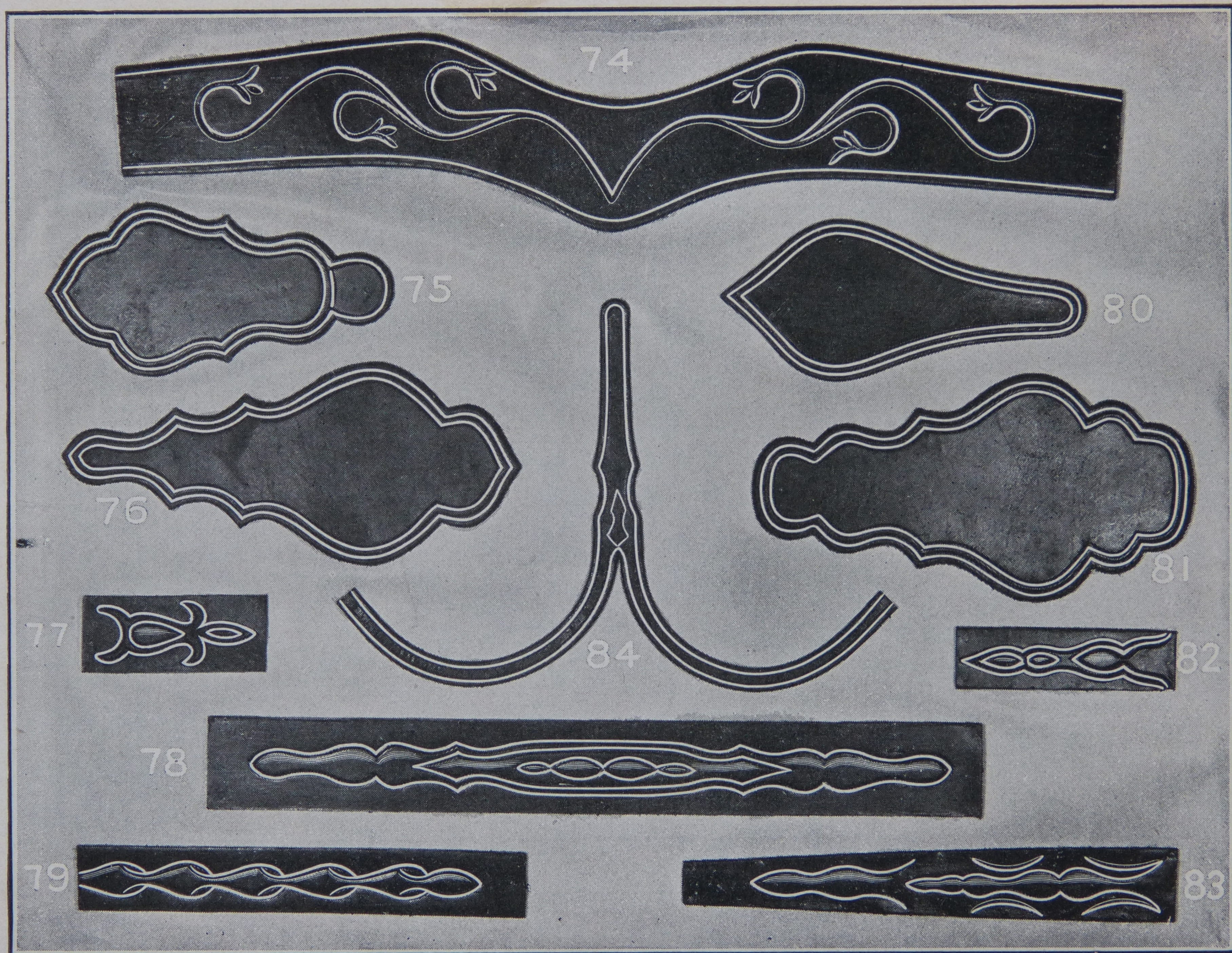
No. 86.....size $\frac{7}{8} \times 19\frac{3}{4}$
 No. 91.....size $1\frac{1}{4} \times 20\frac{1}{4}$

No. 87.....size $\frac{7}{8} \times 19\frac{1}{2}$

No. 88.....size $\frac{7}{8} \times 19\frac{3}{4}$

No. 89.....size 1×20

Moulds made from these patterns or any style to order.



Brass Creasing Moulds.

Figured Patterns for
**BREAST COLLAR, BREECHING,
 NECK STRAPS &c.**

(Illustrated on page 82.)

No. 74.....	size $2\frac{1}{4} \times 21$
“ 75.....	“ $3\frac{1}{2} \times 7\frac{1}{2}$
“ 76.....	“ $4\frac{1}{4} \times 9\frac{3}{4}$
“ 77.....	“ $1\frac{1}{2} \times 3\frac{1}{2}$
“ 78.....	“ $1\frac{1}{4} \times 15$
“ 79.....	“ $1 \times 8\frac{3}{4}$
“ 80.....	“ $3\frac{1}{2} \times 7\frac{3}{4}$
“ 81.....	“ $4\frac{1}{2} \times 9\frac{1}{2}$
“ 82.....	“ $1\frac{1}{4} \times 4\frac{1}{2}$
“ 83.....	“ $1\frac{1}{2} \times 9$
“ 84—Winker Stay.	

Moulds from these patterns or any style to order.

It pays to use
 Moulds.

Save more than
 80 per cent.

Produces **BETTER**
 and more **UNIFORM** work
 than when done by
 hand.

RANDALL DISPLAY RACK.

THIS RACK is made on an entirely different principle from any rack heretofore put on the market.

The weight on the Arms is supported by the floor, which prevents sagging from the wall or partition, which is always the case when the Racks are not thus supported. The sagging of the Arms is overcome by a brace running from a point near the outer end of the Arm to a base resting on the floor.

The Arms will support 50 to 60 pounds each, and not sag.

The Arms are furnished with pins for easily attaching the Blankets, Robes, etc.

Arms, 5 feet 9 inches long. Height of the Arm from the floor is 5 feet 4 inches.

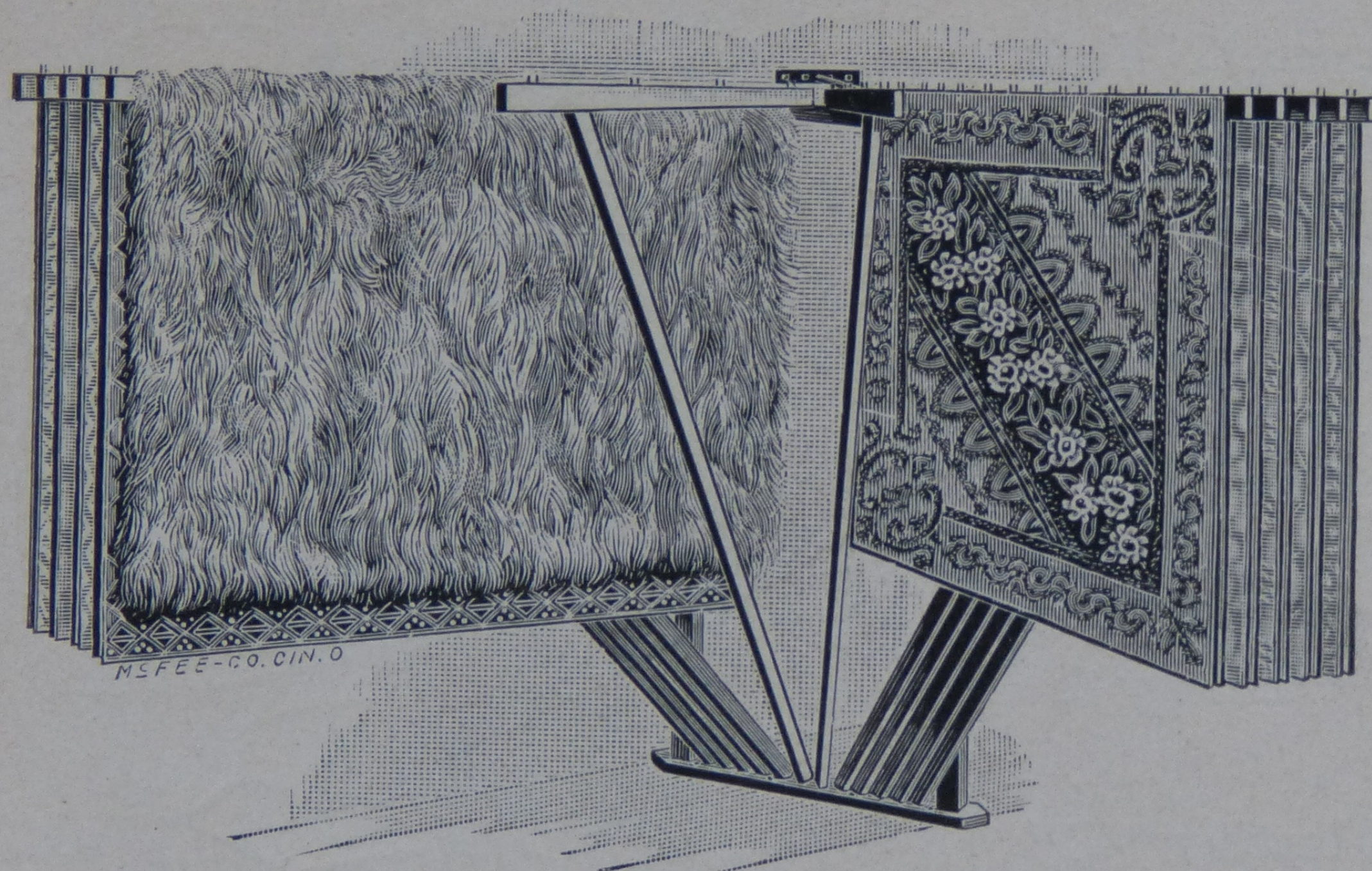
They are constructed so that as they are set up they can be made either into a right-hand or left-hand Rack. The Arms may swing either to the right or left as swung against the wall. They are simple and easily set up.

These Racks display Blankets, Lap Robes, Fly Nets, Covers, Dusters, and sheets in the best possible manner. Racks with any number of arms made to order.

They save handling and folding, and keep goods smooth and clean, and enable the salesman to display them with the utmost ease and to the very best advantage.

These Racks are fully guaranteed, and give universal satisfaction.

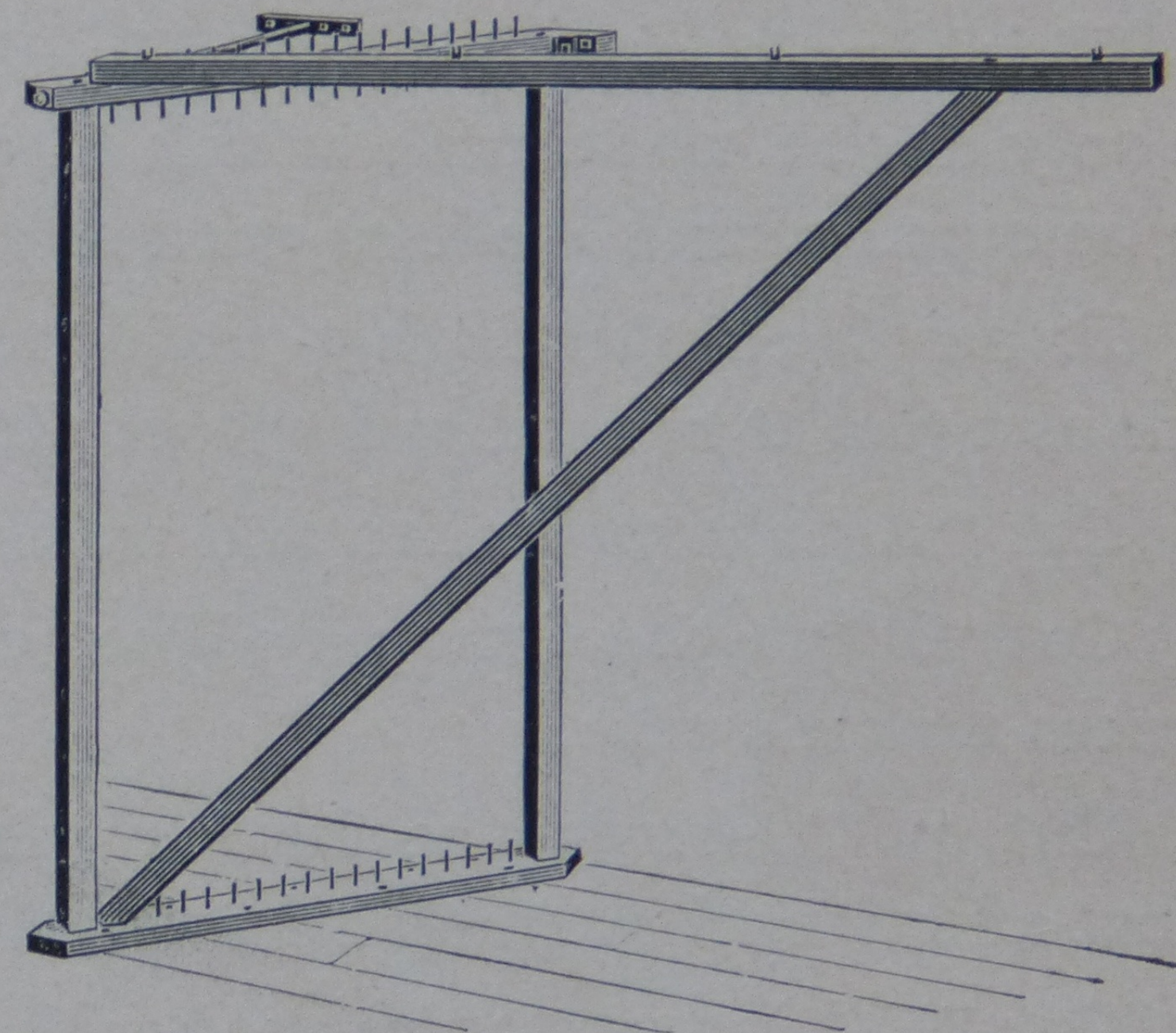
RANDALL DISPLAY RACK.



This cut shows a blanket hung on an arm by the brass pins furnished with the racks.

Any rack may be set up either **right** or left hand.

Each Rack securely boxed.



Arms Swing Right or Left.

This cut shows the Rack as set up when the arms swing to the **right** against the wall.

PRICES.

12	Arm Rack	.....	\$ 6.00
18	" "	.....	8.00
24	" "	.....	10.00

Patent Collar-Crimping Vise.

This simple, practical tool fills a long felt want. It is the only device made with which a broken throated collar can be repaired and made as good or even better than new.

It has been thoroughly tested and is offered to the trade as a tool they need and one worthy of their confidence.

Cut "A" shows broken and mended collar.

Cut "B" is the Crimping Vise, can be used with any harness maker's vise.

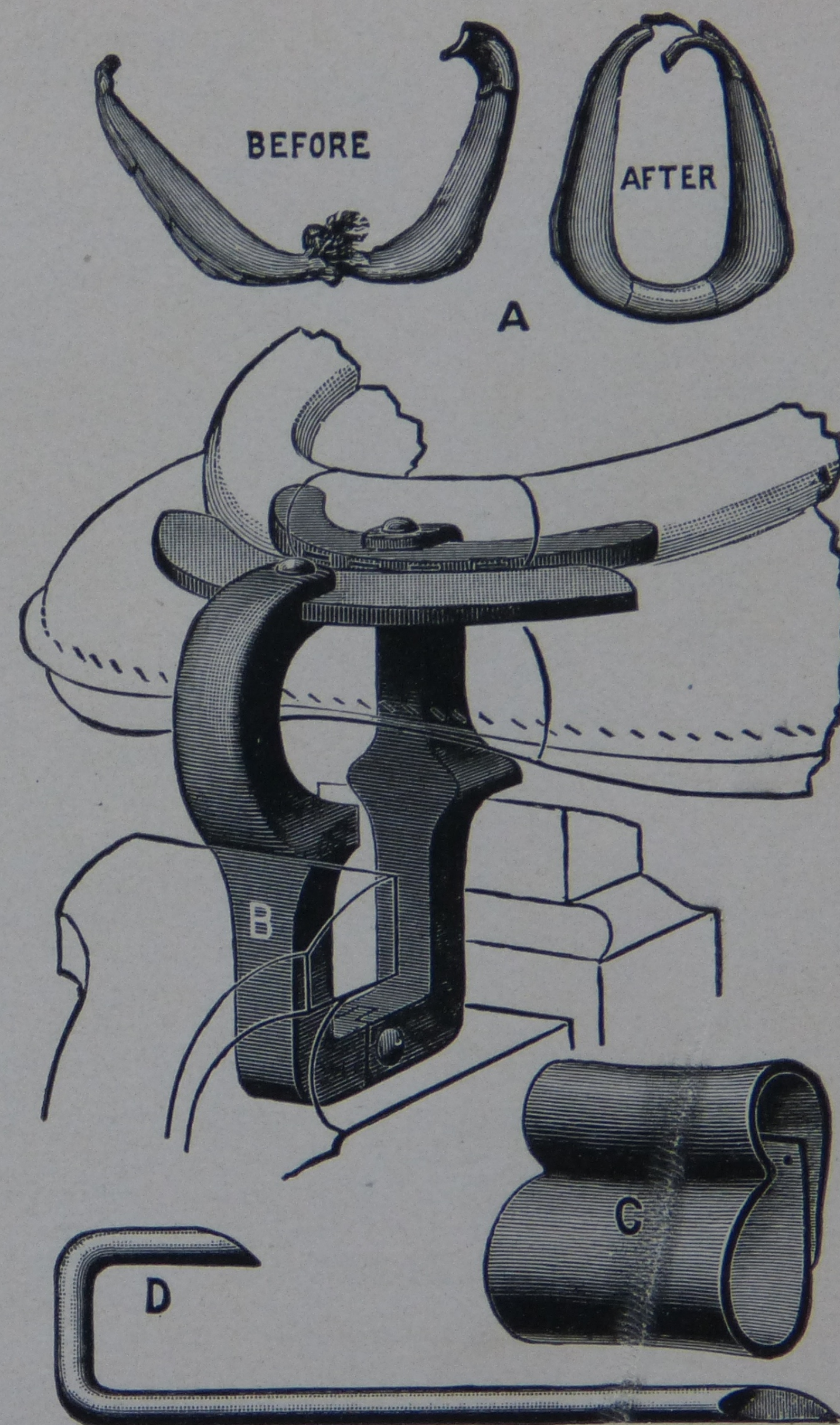
Cut "C" shows the leather piece for patching the throat after it is formed by crimper "B."

Cut "D" shows staples used with crimped leather "C" for patching throat of collar, exact size.

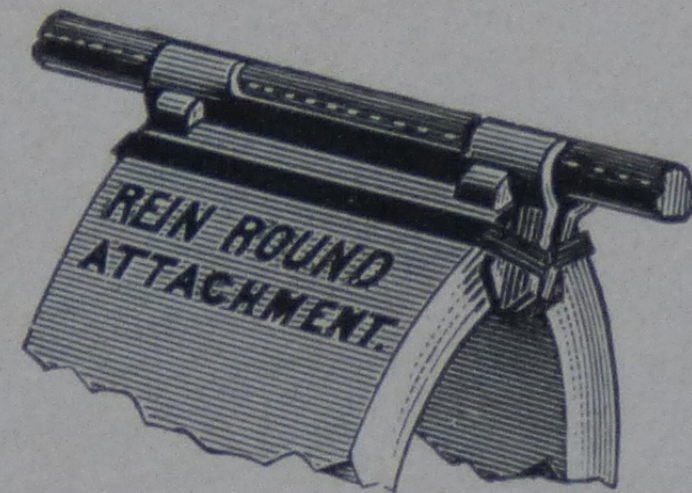
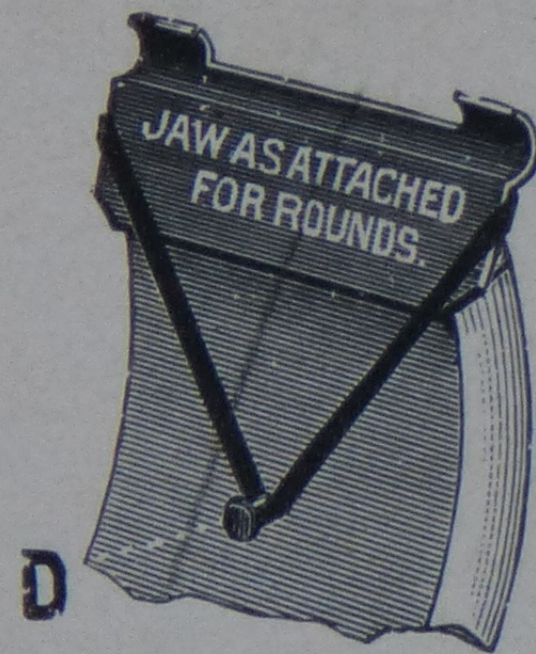
STRONG. RELIABLE. PRACTICAL.

Price, \$2.50

Clinch Staples "D" 25c. per lb.



REIN ROUND ATTACHMENT.



This device for holding rounds while being stitched is practical and a labor-saver. Will fit to any jaw.

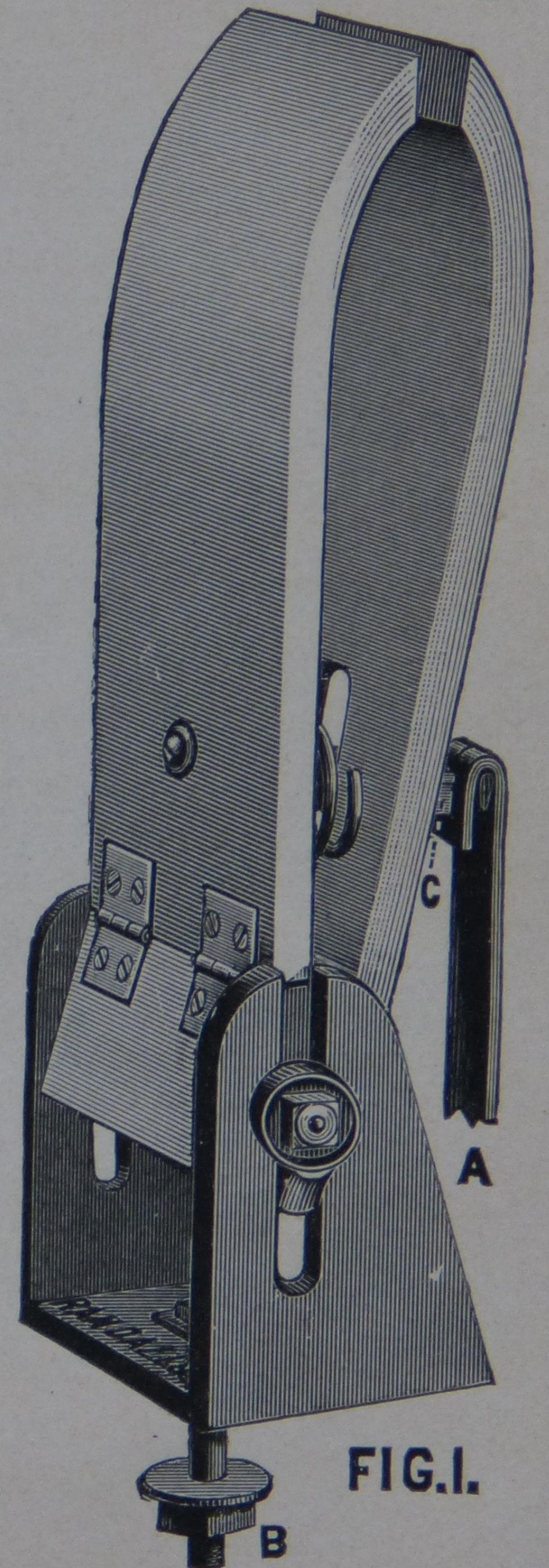
25 Cents per Pair.

ADJUSTABLE JAW.

Fits Any
Seat.

Can be Set
any Height
or Angle.

\$1.50



See Pages 88 and 89.

STITCHING HORSES.

AFTER more than twenty-five years' experience we are making the very best **Wood Jaw Stitching Horse** that can be produced.

Jaws, sugar maple, oil finished; 17 ½ inches high, 5 inches wide, 3 inches thick at base.

Any height of Jaw made to order.

Stool seat of 2-inch poplar, hollowed seat; legs and rounds of hickory.

Steel springs in all Jaws.

We recommend these horses and guarantee them first-class.

The **Adjustable Jaw Stitching Horse** is an excellent horse.

The Jaw can be set from 16 to 19 inches in height, and leaned at any angle, and bolted to the seat in any position desired.

Can also be set right or left hand.

The construction of the Seat is the same as in the Wood Jaw Stitching Horse.

In buying Stitching Horses ask your dealer for the "Randall Horse," and see that the Horse has



stamped on the Jaw and Seat.

**Beware of
Imitation.**

Wood Jaw Stitching Horse	\$2.50
Adjustable Jaw Stitching Horse	2.75
Patent Adjustable Jaw (will fit on any stool)	1.50
Rein Round Attachment, will fit any Jaw .....	.25
Brass Lining Jaw .....	.25

Wood Jaw Stitching Horse.



\$2.50

Adjustable Stitching Horse.

89



\$2.75

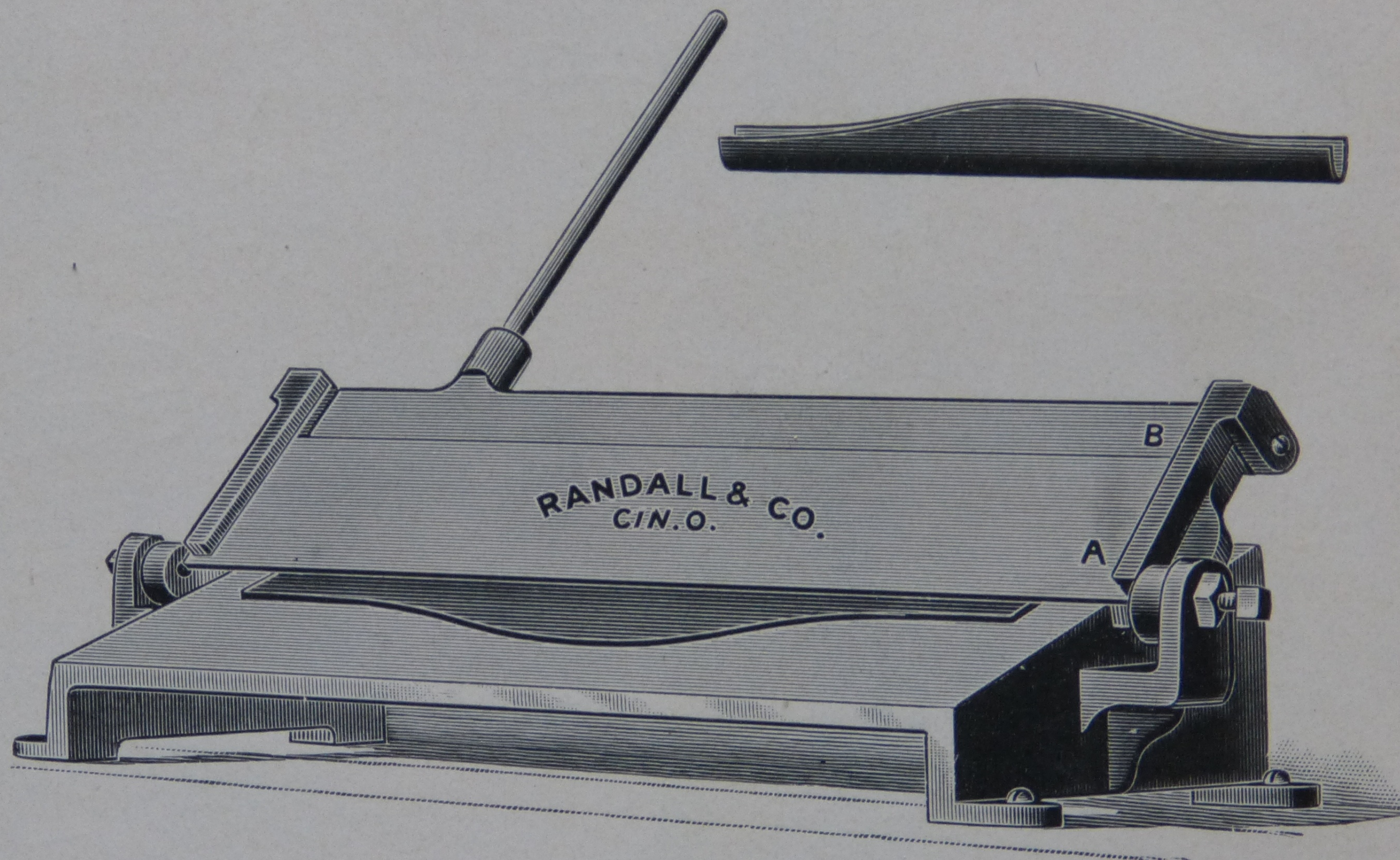
See page 88.

RAPID CRUPPER FOLDER.

Breaks Cruppers in
the middle.

Saves Time in
Trimming.

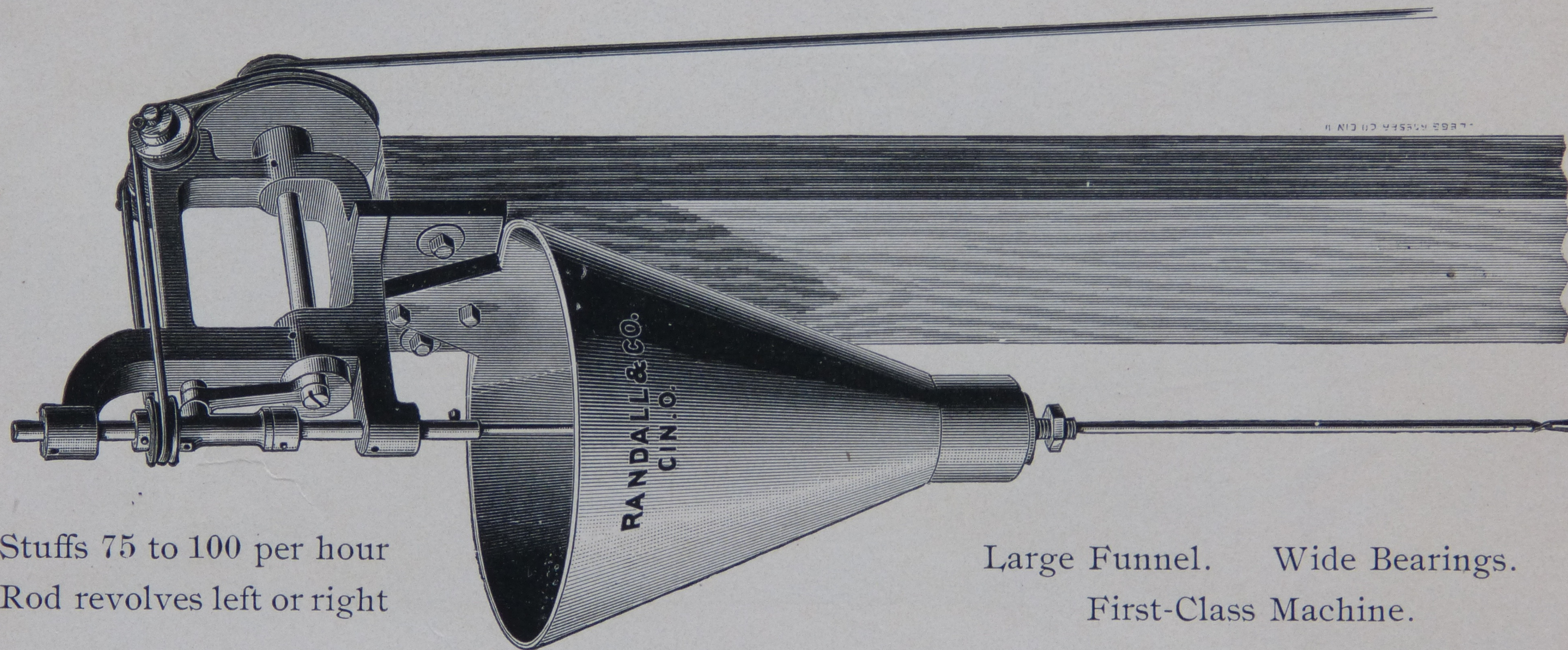
Every Factory
Needs One.



Swinging jaw "A" holds crupper in position, as jaw "B" carrying jaw "A" is brought down and folds the crupper. Suited to any size crupper.

Price, \$12.00

RAPID CRUPPER STUFFER.



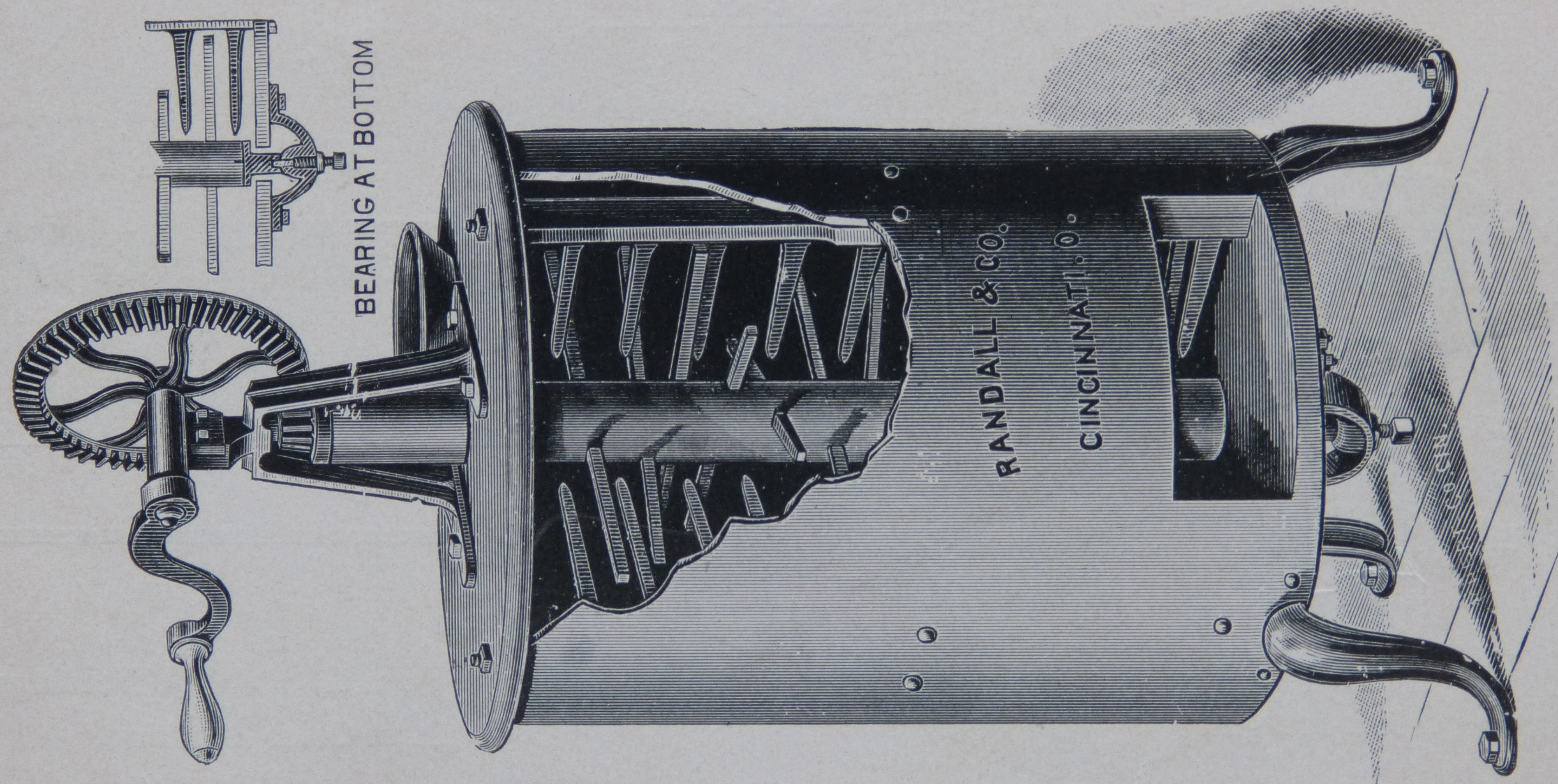
Stuffs 75 to 100 per hour
Rod revolves left or right

Large Funnel. Wide Bearings.
First-Class Machine.

Price, \$25.00

With Foot-Power Driving Attachment, **\$35.00**

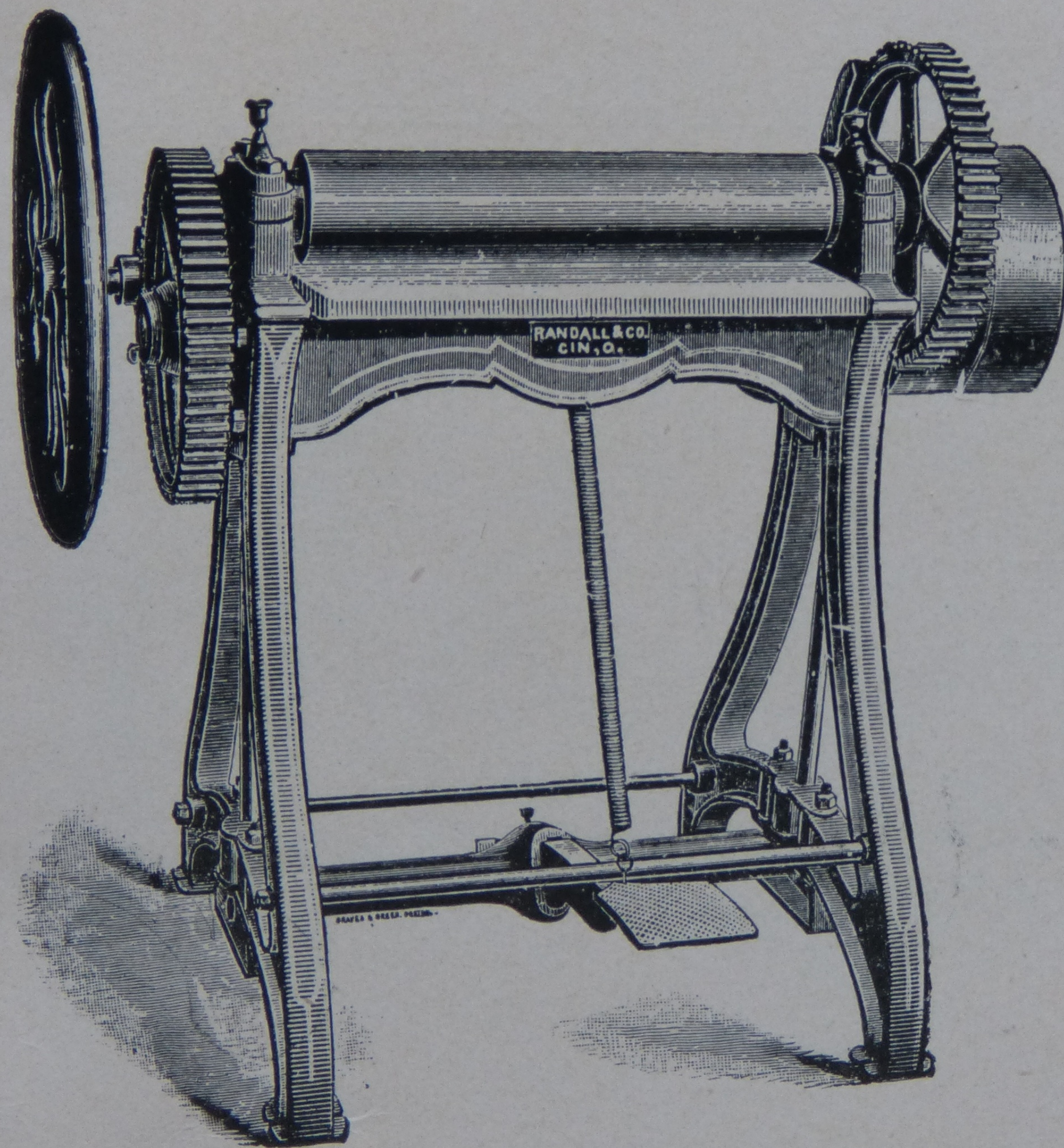
IMPROVED HAIR BEATER.



Picks Cattle and Goat Hair or Wool Flocks.

Price, \$16.00

POWER ROLLING MACHINE.



A Strong, Reliable Machine.

Rolls 30 Inches Long.

Tight and Loose Pulley, 16 x 4.

Speed, 125. Weight, 1,250

PRICE, \$115.00

Smaller Sizes in Proportion.

EMERY GRINDER.

This machine takes the place of a Grindstone or a file for many jobs, and does the work very quickly.

It can be put up anywhere. It is strong and well made.

It is instantly ready and operates at a high or low speed, as may be desired, and does the work the same as a power grinder. It is the most perfect foot power grinder on the market. Furnished with a high-grade emery wheel 7 x $\frac{3}{4}$ inches. A valuable tool in a harness factory.

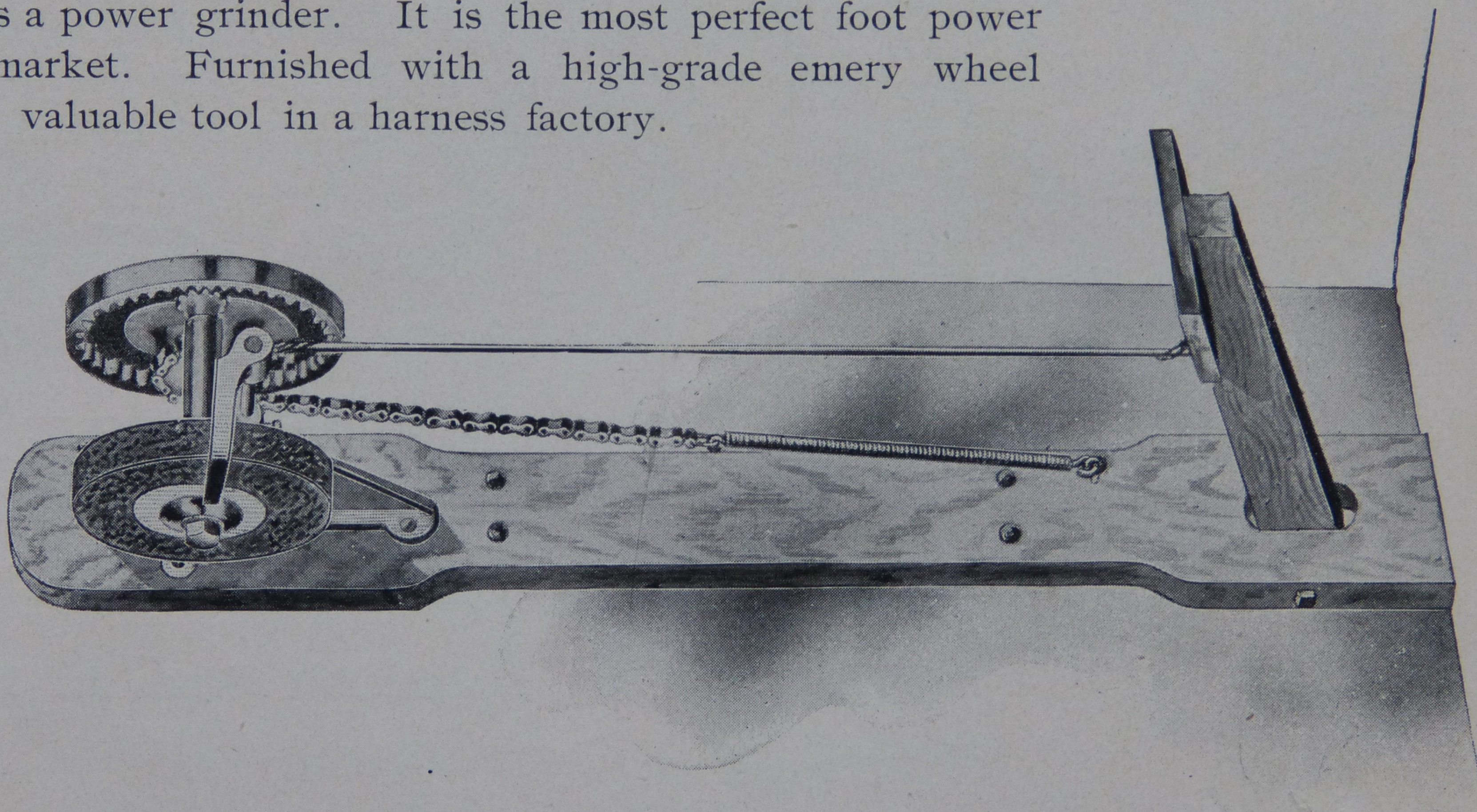
Sharpens

**Chisels,
Knives,
Tools, &c.**

Grinds

**Iron,
All Kinds.**

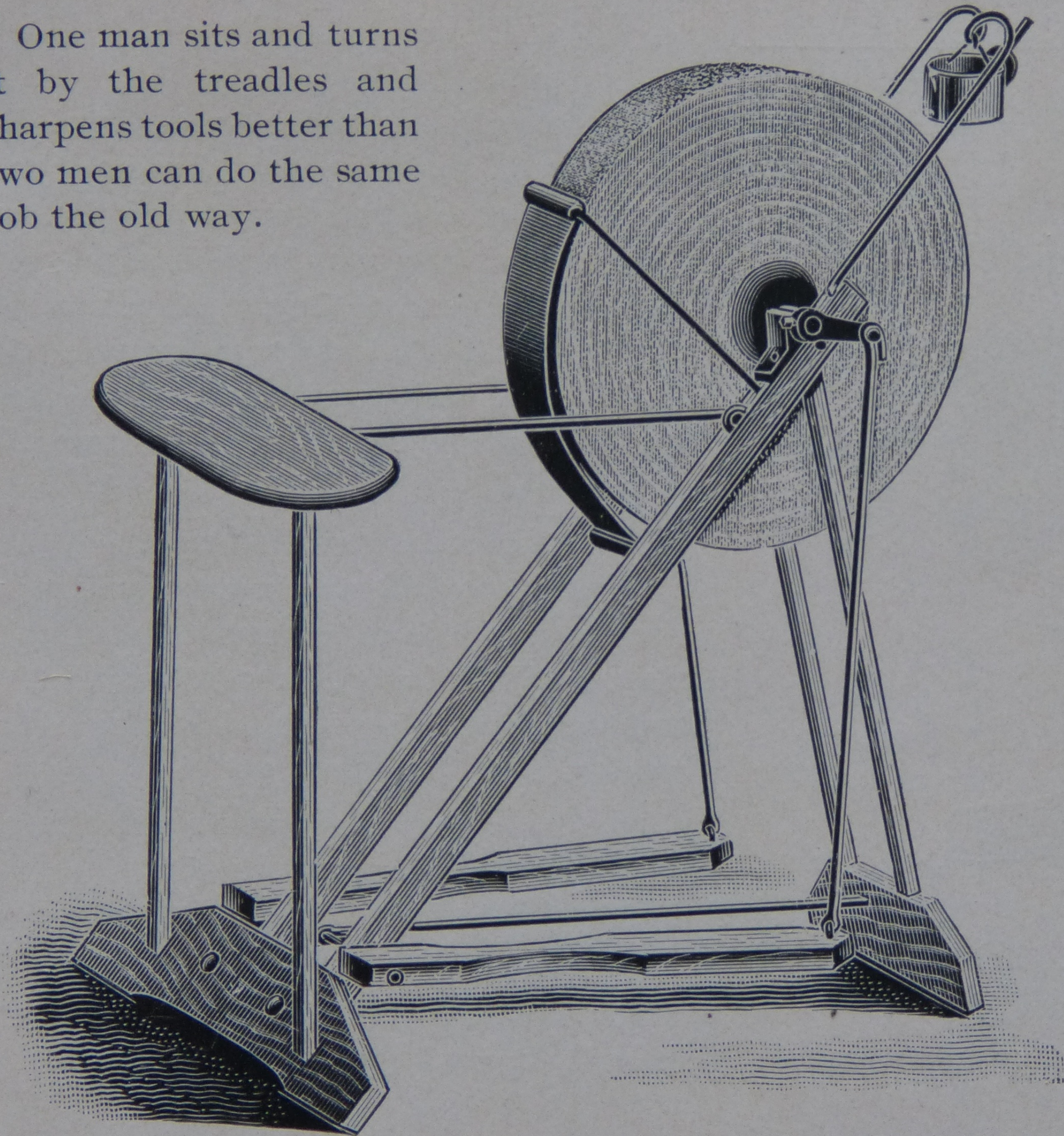
**Brass,
Copper,
Etc.**



Price, complete, (crated) \$4.50

DOUBLE-CRANK GRINDSTONE.

One man sits and turns it by the treadles and sharpens tools better than two men can do the same job the old way.



High Grade and Handy.

No time lost in waiting for another to turn the stone.

No irregular speed, the two treadles give a steady motion.

No uneven wear on stone or tool, therefore the stone runs true and tools can be evenly sharpened, and have straight edges.

The Frame

Is made of hardwood and wrought iron, well put together.

The Stone

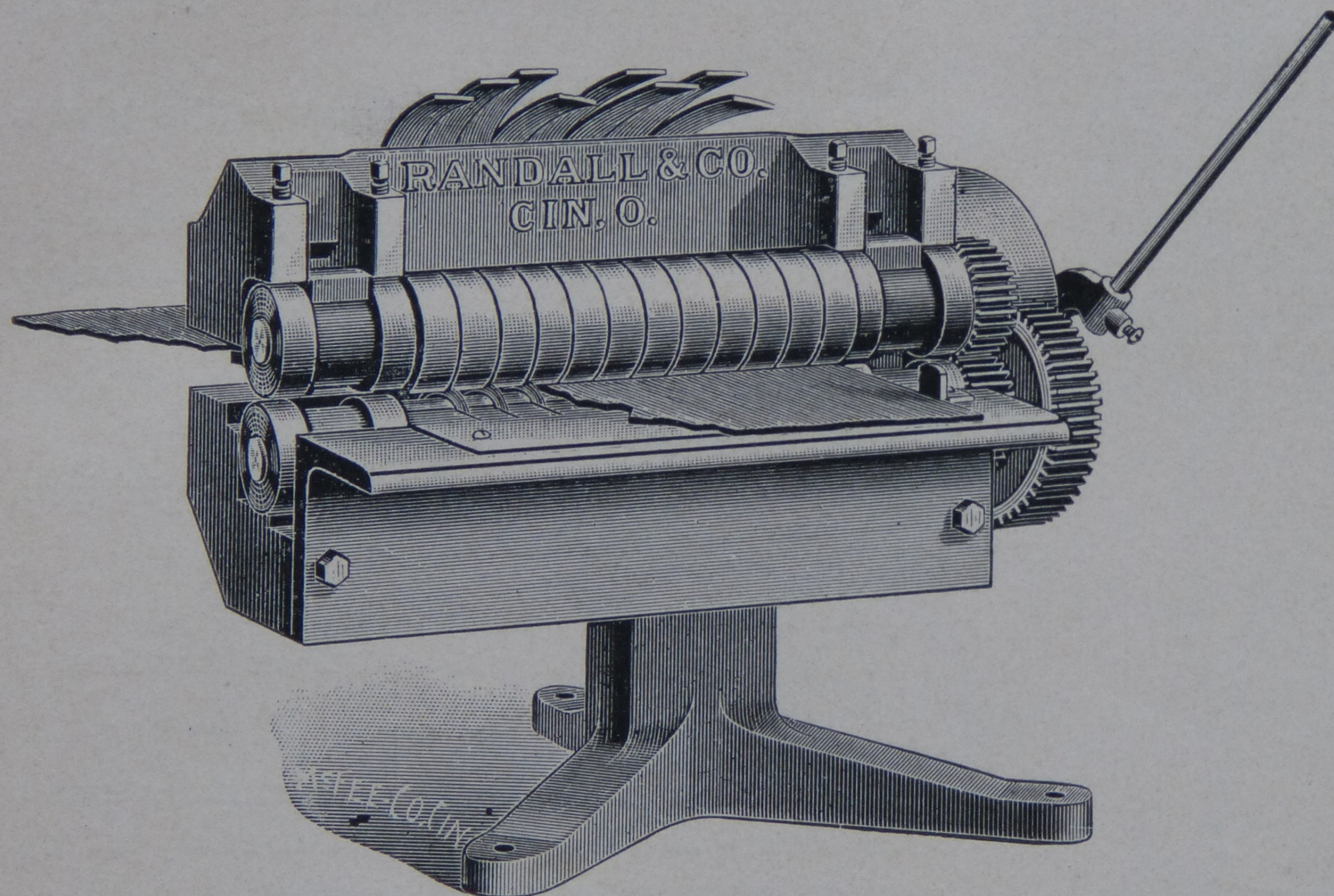
is of good grit and about $2\frac{1}{2}$ x 18 inches.

The Frame and Stone are compactly crated together—flat, for shipping, but easily set up. Shipping weight about 60 pounds.

Price, \$3.50

With Roller Bearings, **\$4.00**

RANDALL STRAP CUTTER—Power or Hand.



This machine is made for cutting light or heavy stock. The main Frame is cast in one piece, strong and very heavy. The overhanging arm, which is supported at the cog end of the machine, permits any width of stock to pass between the Rolls. The knives are made of the best steel, carefully tempered and automatically ground.

The Machine is supplied with Rolls for cutting several Straps any one width desired from a side of leather. These Rolls may be interchanged for other widths, and the changing of the roll is done very quickly.

The Machine has our Patent Clutch Pulley and Shifter Attachment.

Everything about this Machine is strictly first-class.

For Harness, Belt, Trunk and Brush manufacturers.

Machine complete for either $\frac{1}{2}$, $\frac{5}{8}$, or $\frac{3}{4}$ width of Strap, **\$40.00**

Extra Sets of Rolls, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ inch, **\$14.00**

Other widths in proportion.

STRING AND THONG CUTTER.



This machine for its size is the most simple and practical in construction of any Cutter made. The knives can be easily sharpened and replaced. The lower roll has small steel teeth, which bear against the side of the knife, and make the feed of the machine very positive.

The machine is built for cutting strips 2 inches wide into 5 or 6 strings to the inch in half of the roll, and 7 to 8 to the inch in the other half of the roll, or any other number desired; or it can be built to cut strips 4 inches wide, 6 or 7 strings, or any other number to the inch desired. It may be driven by hand or power.

Price, \$24.00

ACME PUNCHING MACHINE.

A FINE TOOL.

THIS Machine works automatically. As the treadle is pressed down, the guide-bars close upon the strap, (any width $\frac{1}{2}$ to 3 inches) and bring the center of the strap over the center of the Punch and hold it in position. The Punch Block then descends upon the strap, and lastly the punches are raised through the table and punch the strap. This causes the punchings to fall to the floor, leaving the table always clean. As the treadle is released, the Punch Block lifts, Punches are withdrawn from the strap, Jaws open, and the Machine is ready for punching another strap.

The Punches cut into a narrow strip of hard maple. By changing the position of the Blocks they can be used a long while, and can be renewed at a very small cost.

The Punches are fastened to a bar, singly or in gangs, from 2 to 10 in number.

This Machine will punch Traces, both flat and raised, Bearers, and all kinds of single straps accurately, and in less than one-fourth the time it could be done by hand, the holes being always the right distance apart, and in line with the sides.

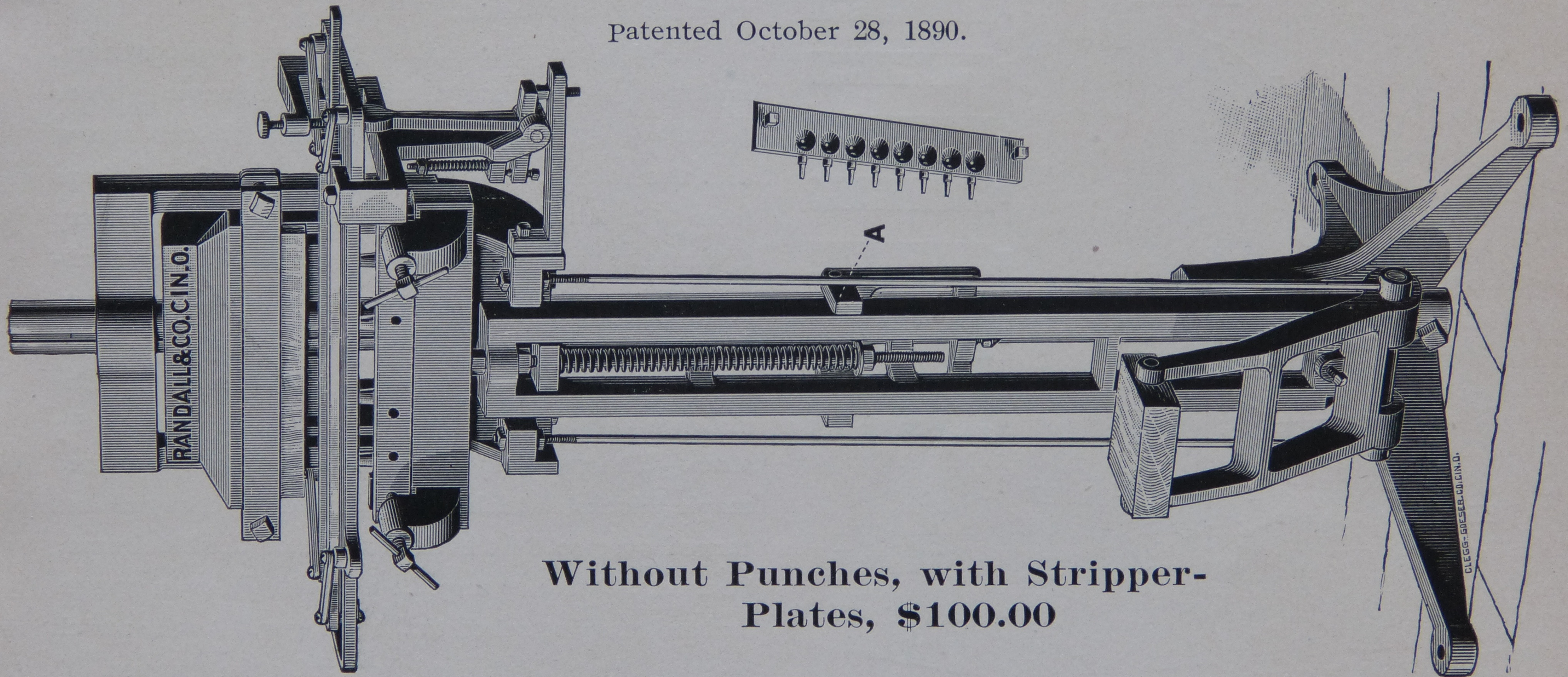
This Machine, without Punches, with Stripper-plates, \$100.00

Any combination of round or oval Punches can be made to order. Prices the same as when furnished with the No. 4 Punching Machine on page 101.

This Machine will save its own cost the first year in any wholesale factory.

ACME PUNCHING MACHINE.

Patented October 28, 1890.

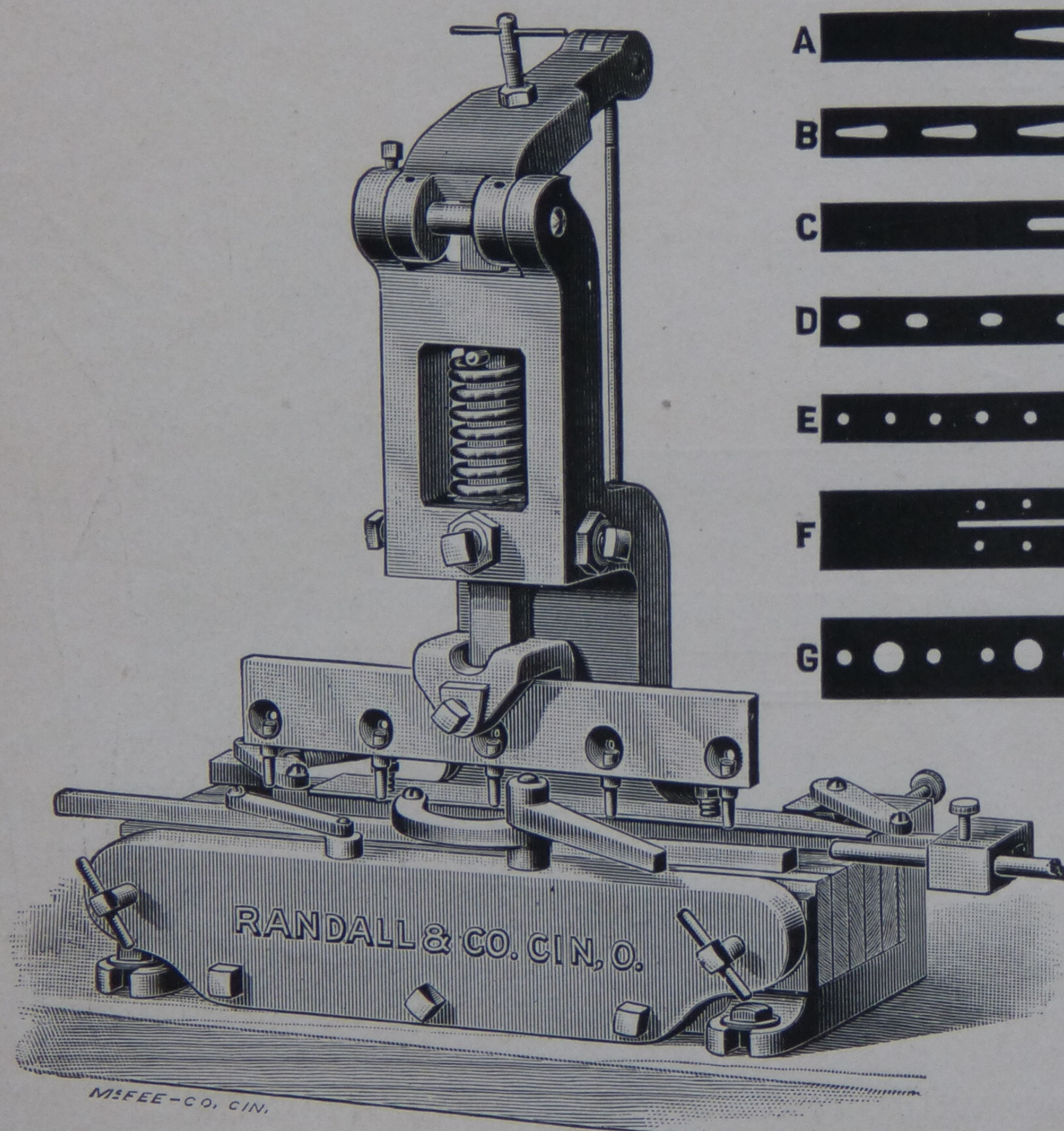
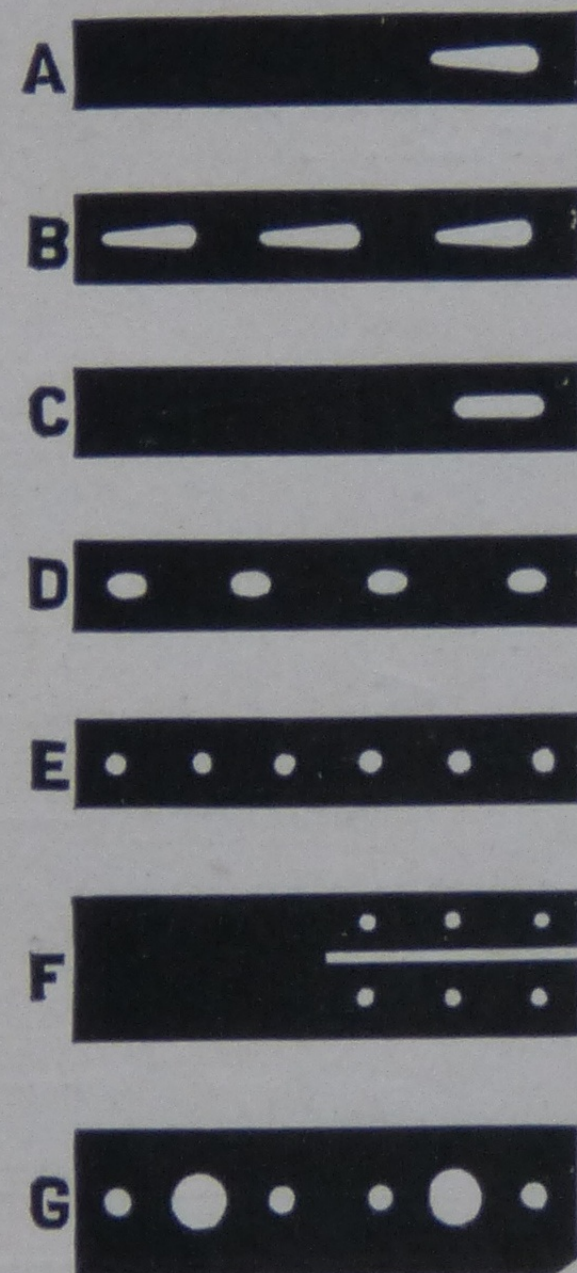


Without Punches, with Stripper-
Plates, \$100.00

Always punches to the center of the strap without adjusting to the width.

No. 4 PUNCHING MACHINE.

Styles of Punches



This machine is simple, first-class in every respect, and built to last.

It punches **traces**, **bearers** and **single straps**, rapidly and accurately, at a **great saving over punching by hand**. An **adjusting thumb screw** sets the machine to punch in the middle of straps from $\frac{3}{8}$ to 3 inches. The **front jaw** presses the strap against the **rear jaw** and holds it while being punched. This machine is operated by a **treadle** fastened to the floor and so adjusted that a boy can do heavy punching with ease. A stop **gauge** regulates the distance the holes are punched from the end of the strap. The punches cut on a table of narrow, hard maple blocks, which can be readily changed and turned over so that both surfaces of the blocks may be used. **Punches** may be used **singly** or in **gangs**, and are easily attached to the plunger. As the punch rises the strap is detached from it by the stripper.

ACCURATE—FAST—RELIABLE.

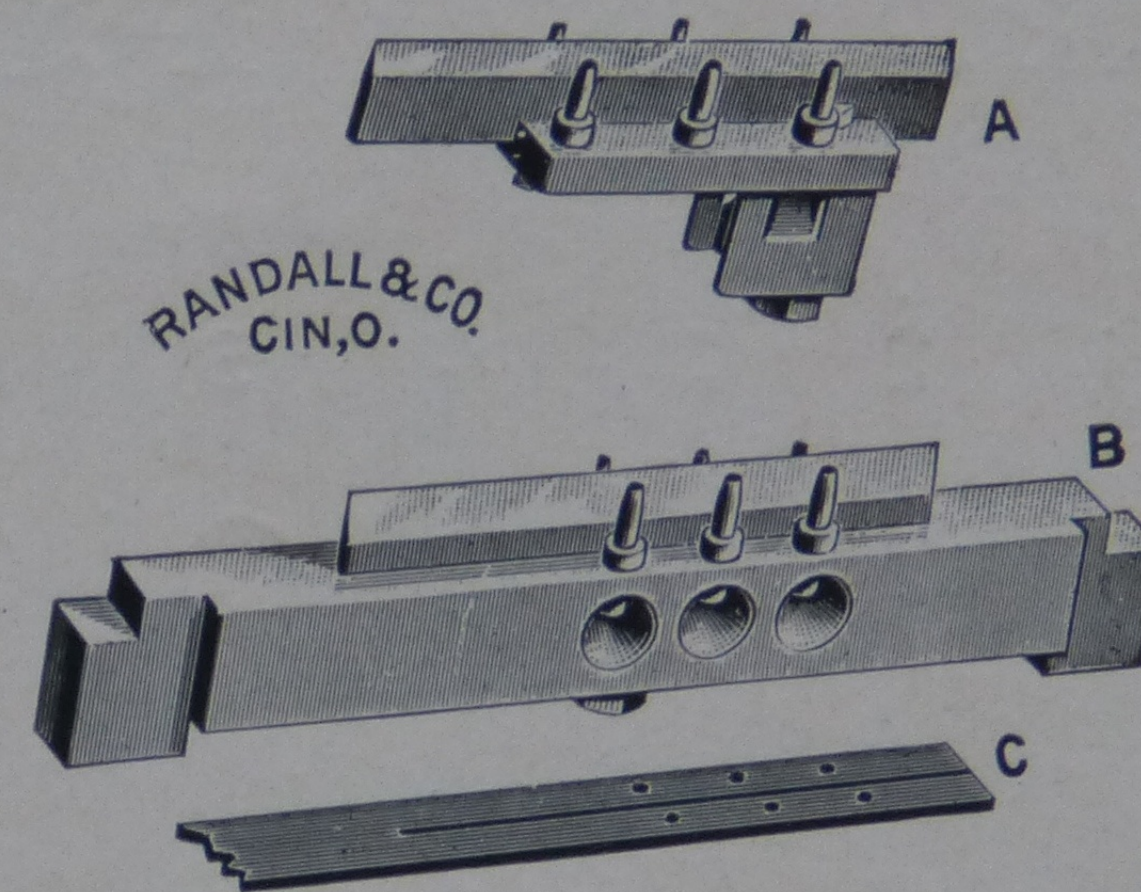
Price, \$25.00

PRICES OF PUNCHES FOR ACME AND No. 4 PUNCH MACHINES

Trace Punches to fit machine, 1 to $1\frac{1}{2}$ inches, each,	\$1.50
Bag Punches " " $\frac{1}{2}$ to 1 " "	1.25
" " " " $1\frac{1}{8}$ to $1\frac{1}{2}$ " "	1.50
Trace and Bag Punches, in gangs of 3 punches, 1 inch, $1\frac{1}{8}$ inches or $1\frac{1}{4}$ inches.....per gang	8.00
Oval Punches to fit machine, Nos. 7 to 10.....each	.85
" " " " in gangs of 4	5.00
Round " " " Nos. 1 to 9, for Single Straps,.....in gangs of 4	4.00
Round Punches to fit machine, in gangs, any size, Nos. 1 to 9 and any number up to 8, for Single Straps	5.00
Round Punches, extra long for Traces, in gangs of 4 Nos. 7, 8, or 9.....	5.00
Hard Maple Punch Blocks .....	.50

In ordering gangs of Punches, state size, quantity, and distance apart of the punches from center to center of holes.

CROWN PIECE SLITTER AND PUNCH.

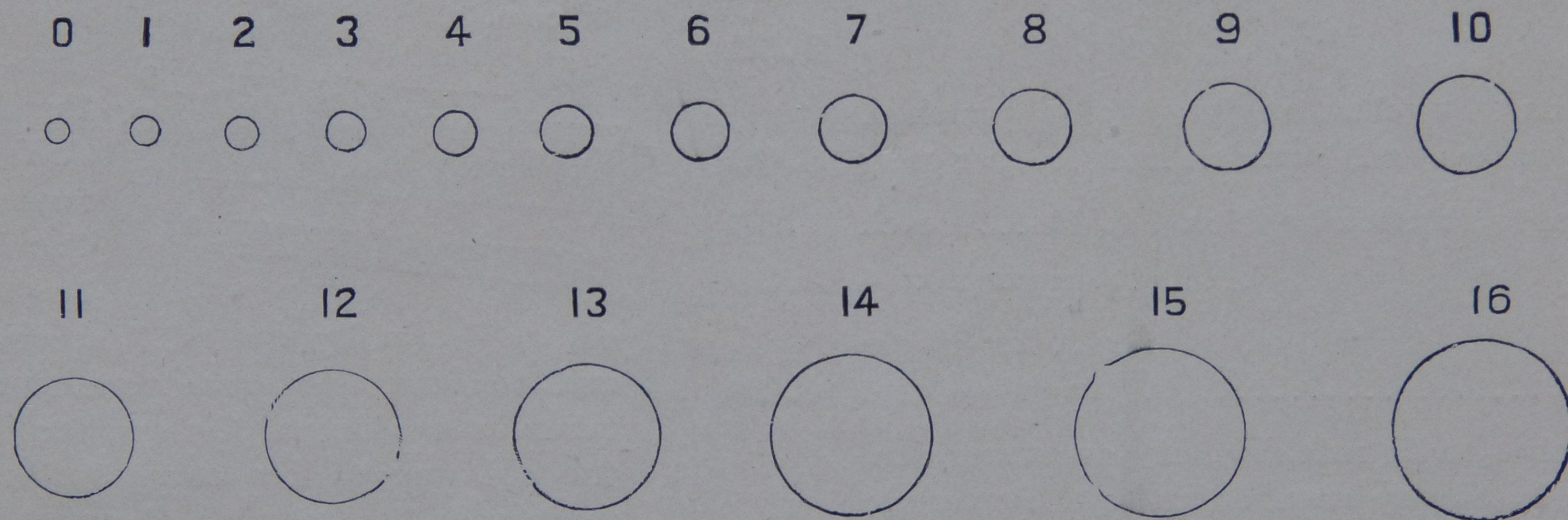


Cuts "A" and "B" show a device for *punching* and *slitting* Crown Pieces or Turnbacks. This device saves very much time, as the Crown Piece can be slit and punched, as shown by cut "C," at one operation, and consumes no more time than would be taken in marking of the end for slitting only, the old way with a round knife. They are made to order to slit and punch any widths ($\frac{1}{2} \times \frac{1}{2}$; $\frac{1}{2} \times \frac{5}{8}$; $\frac{5}{8} \times \frac{5}{8}$; $\frac{5}{8} \times \frac{3}{4}$; $\frac{3}{4} \times \frac{3}{4}$; $\frac{3}{4} \times \frac{7}{8}$, etc.,) and any size and number of holes desired. The Punches are set so that the holes punched in the slit strap are always in the center of the two widths.

Style A for No. 4 Machine... **\$10.00**

Style B for Acme Machine... **12.00**

RANDALL & CO.'S
ROUND PUNCH GAUGE.

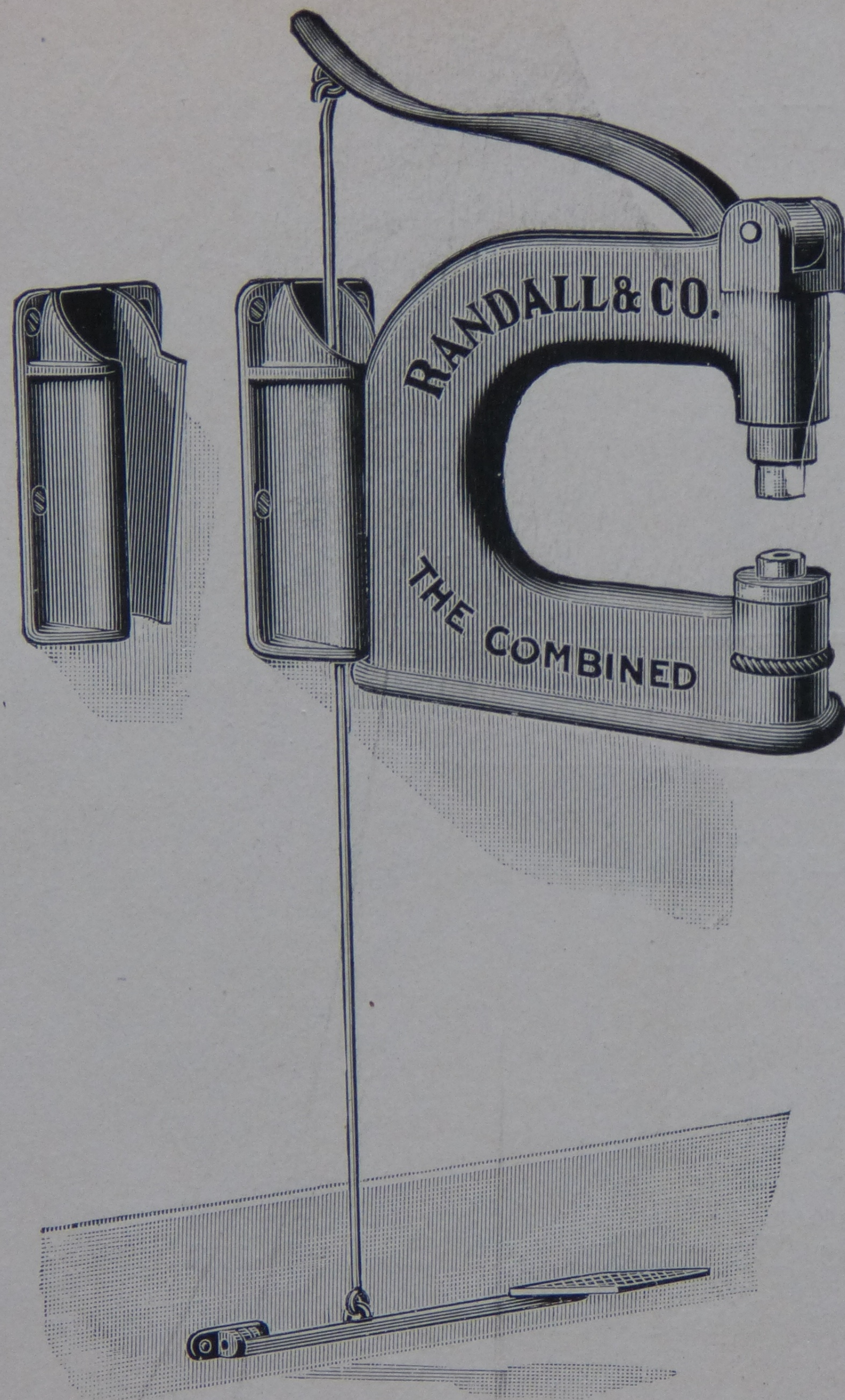


Please use the above Gauge in ordering Round Punches for our Punching Machines.
Any size of Trace, Bag, or Oval Punches furnished, with No. 4 and Acme Punching Machines.

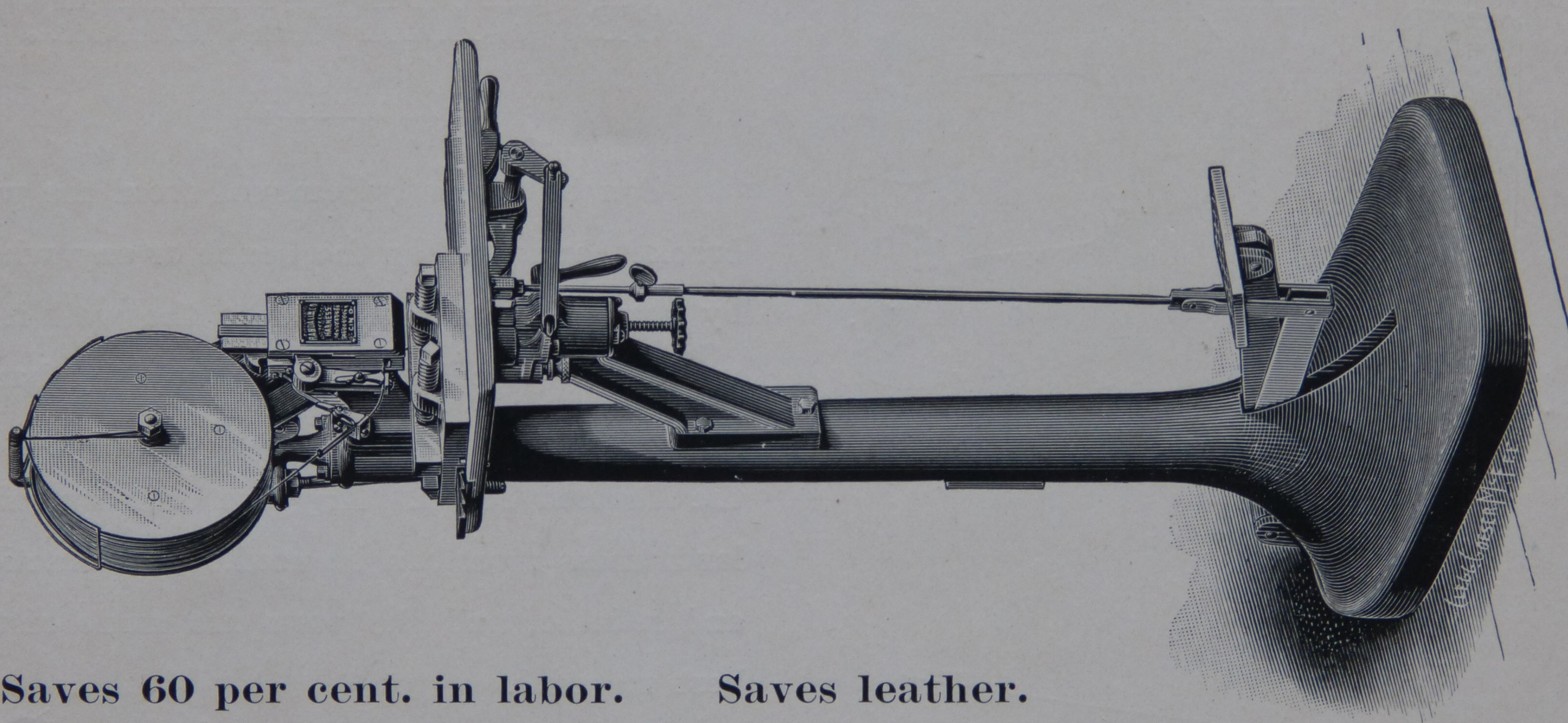
THE COMBINED BENCH OR WALL RIVETER.

Can be instantly removed from the wall bracket, and used on the bench or any where by hand. When attached to the wall it is worked by treadle; on the bench, by hand. The Anvil is adjusted, raised or lowered by the Knurled Collar. Any size ordinary tubular harness rivet can be used. It is practical and reliable, and the parts are made of the best material.

Price, \$8.00



BOX LOOP STAPLING MACHINE.



Saves 60 per cent. in labor. Saves leather.

Produces Bridle Cheek, Hame Tug, Breast Collar and
Breeching Tug Loops of the highest quality.

RANDALL BOX LOOP STAPLING MACHINE

FOR many years single or double pointed tacks driven in by hand have been used instead of sewing in loops for harness parts.

The Loop Stapling Machine shown by the cut on page 104 is the first machine put on the market for automatically stapling loops.

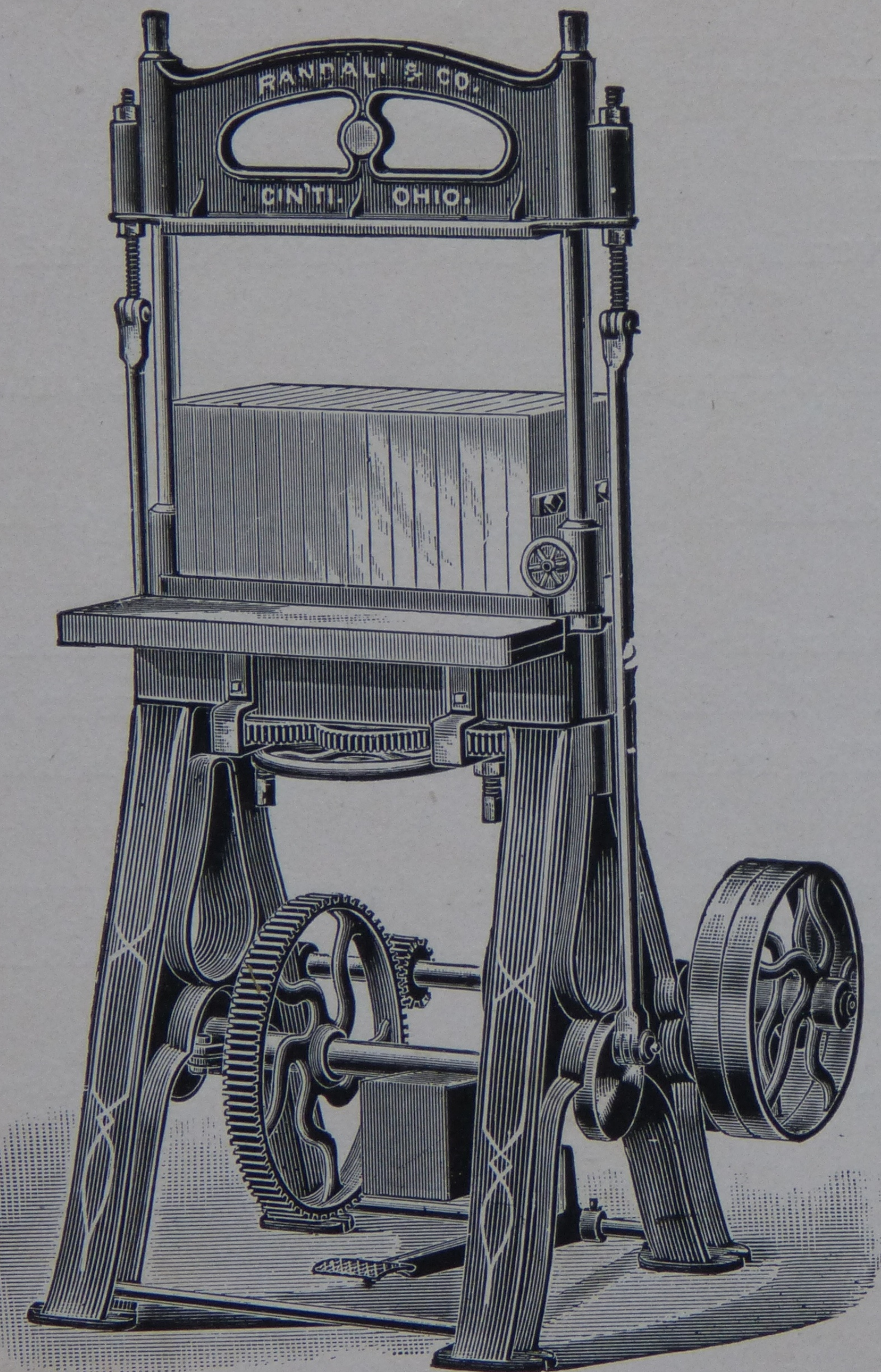
This machine cuts, forms, drives into place and clinches the staple at one stroke of the treadle.

The Loops are built in the various Loop Boxes furnished with the machine, in the base of the box rests the die for pressing the face of the Loop. The Loop when stapled remains in the box while it is pressed by a Power or Screw Press. The back or bottom of the Loop is made oval when under pressure.

When the Loop is ready for stapling the machine automatically places the staples the proper distance apart in the channel, and when the Loop is pressed it is neater, stronger, and smoother than factory Loops stitched with thread the old way.

This machine staples Loops $\frac{1}{2}$ to $1\frac{1}{2}$. Either side creased or plain Loops can be made on this machine.

The Loop Boxes are made of steel. Every part of the machine is made of the very best material and workmanship.



25-INCH Beam Dieing-Out Machine.

This is a strong, reliable machine and will do good work up to its capacity.

The space between the Upright Posts is 25 inches. Length of the Cutting Block, 24 inches; breadth, 10 inches; height, 10 inches. This machine is instantly started and stopped by pressure on the treadle.

As the Block wears away, the adjustment of the machine is such that by raising the table and dropping the beam, the Block can be used up to 2 inches in thickness.

Driving Pulley, 16 x 4 inches; Speed, 450 revolutions per minute.

Weight of the machine, about 1,000 pounds.

Price, \$115.00

Stripping Machine.

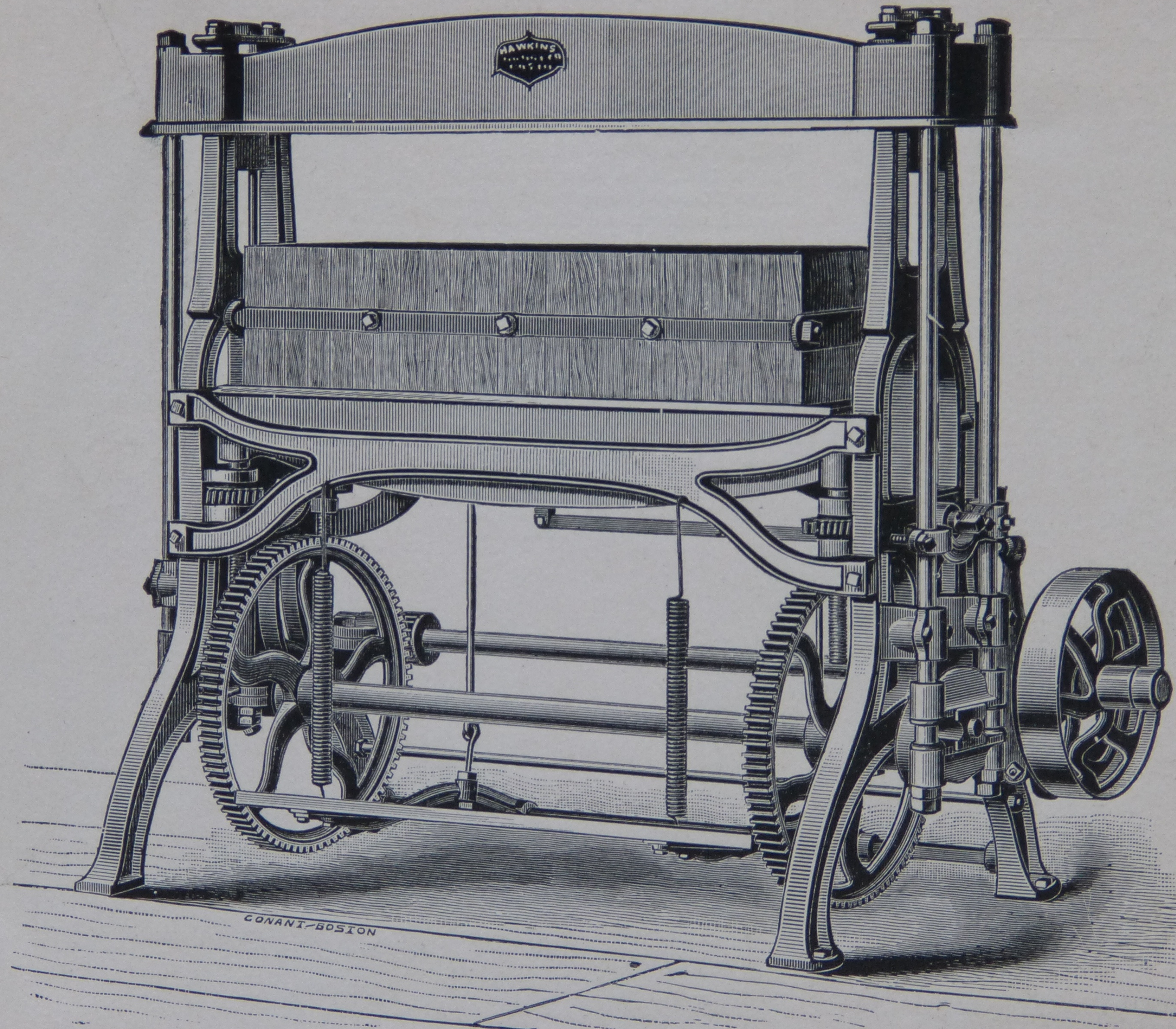
[FOOT POWER]

Four feet long, with straight or fluted cutting knives, for cutting Felt, Patent Leather, etc., for Housings, Coach and Team Pads, Sweat Pads, etc.

Prices quoted on application.

BEAM DIE CUTTER.—4 AND 6 FEET.

107



Weight, 1600 to 2400 pounds.

HEADING TABLE.

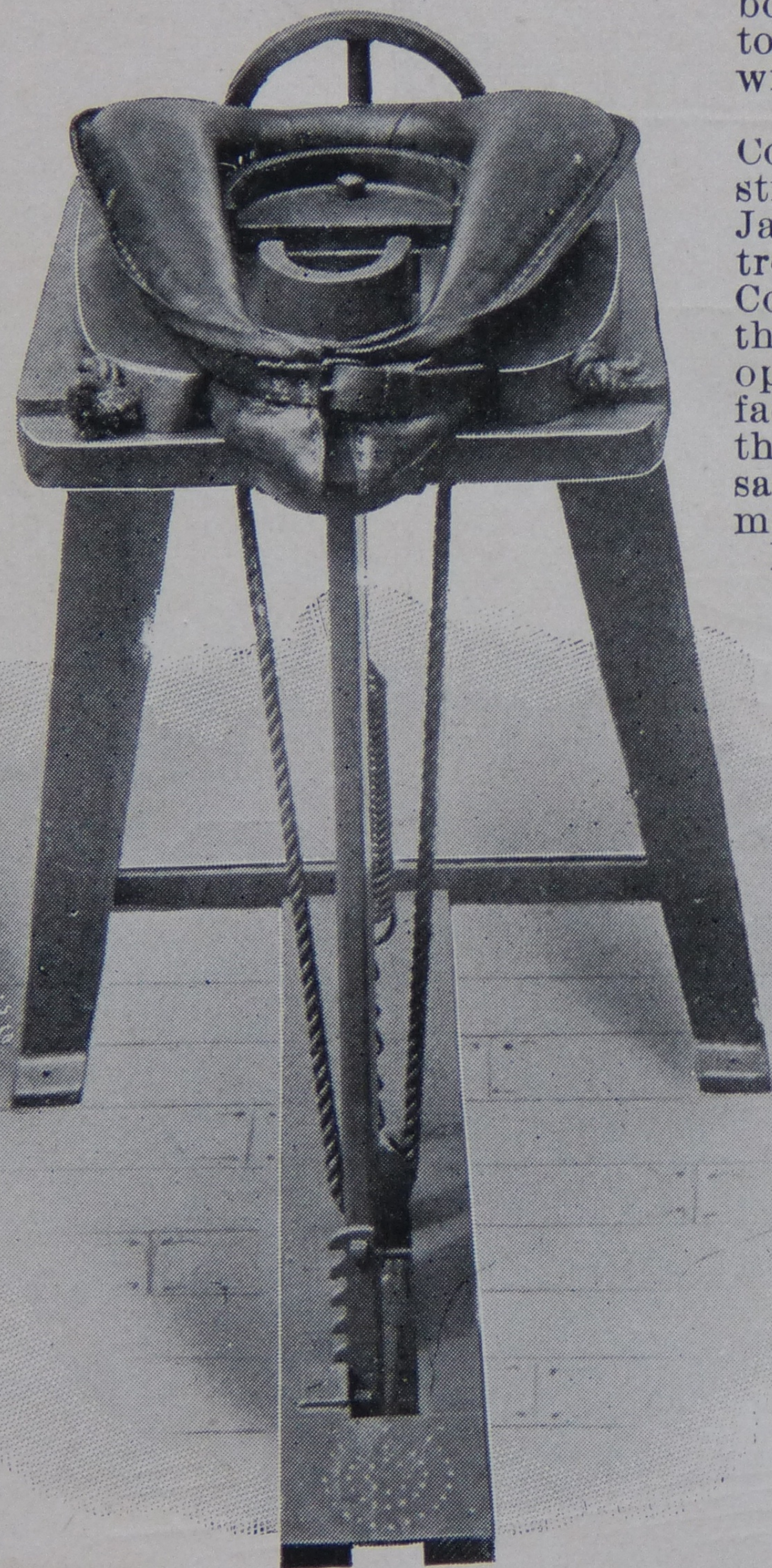
On this machine any size Collar can be stretched, headed, and finished. Forming Blocks for the top and the bottom of any size Collar up to 24 inches in length go with the machine.

With the handwheel the Collar may be slightly stretched, and the two side Jaws pressed together by the treadle catch the Rim of the Collar and hold it firmly to the table, face upwards. The operator can then finish the face of the Collar, giving it the last shape desired before sacking, in the best possible manner.

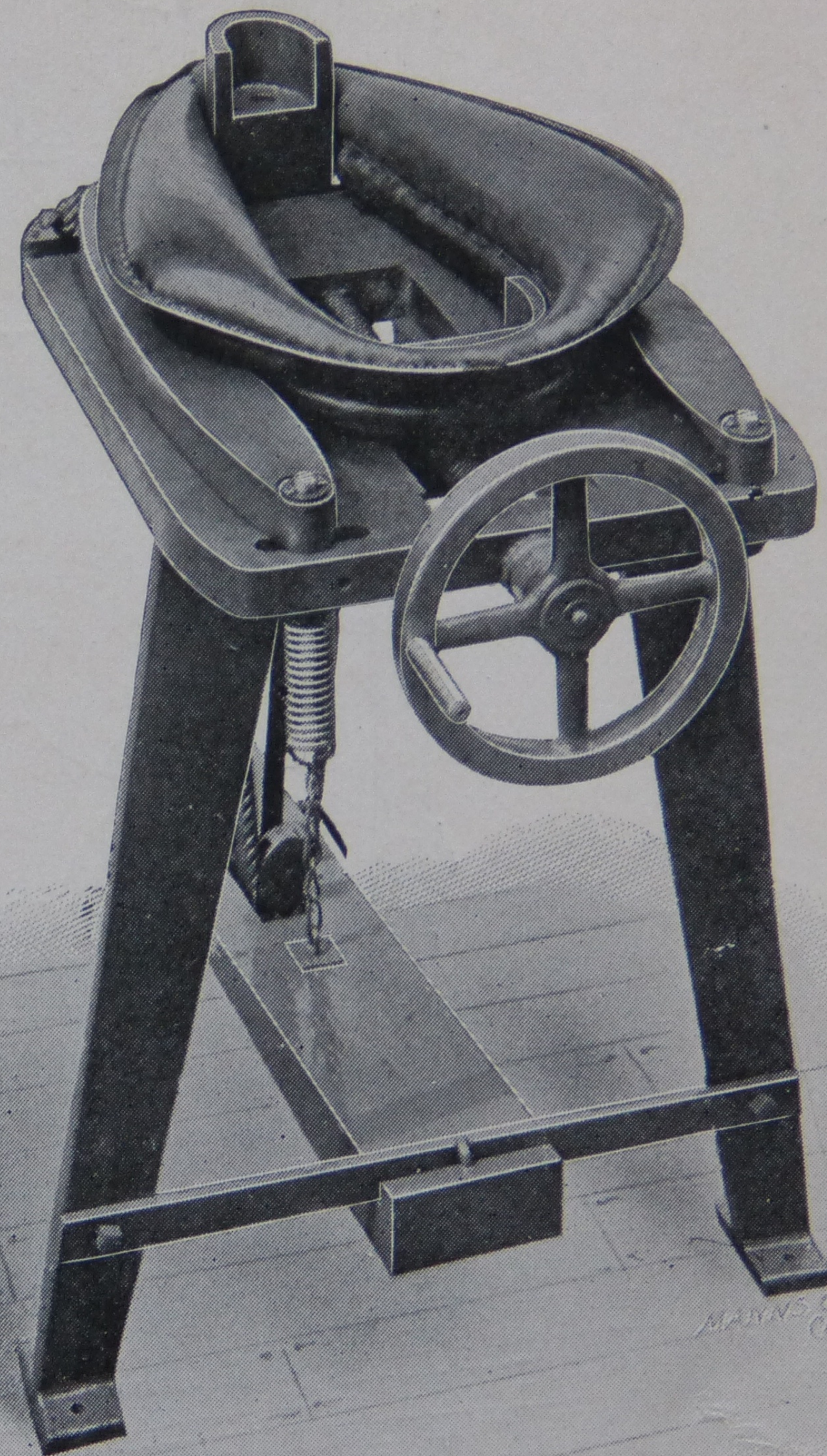
It is made of iron, and everything is strictly first-class.

\$60.00

**TOP
END
VIEW**

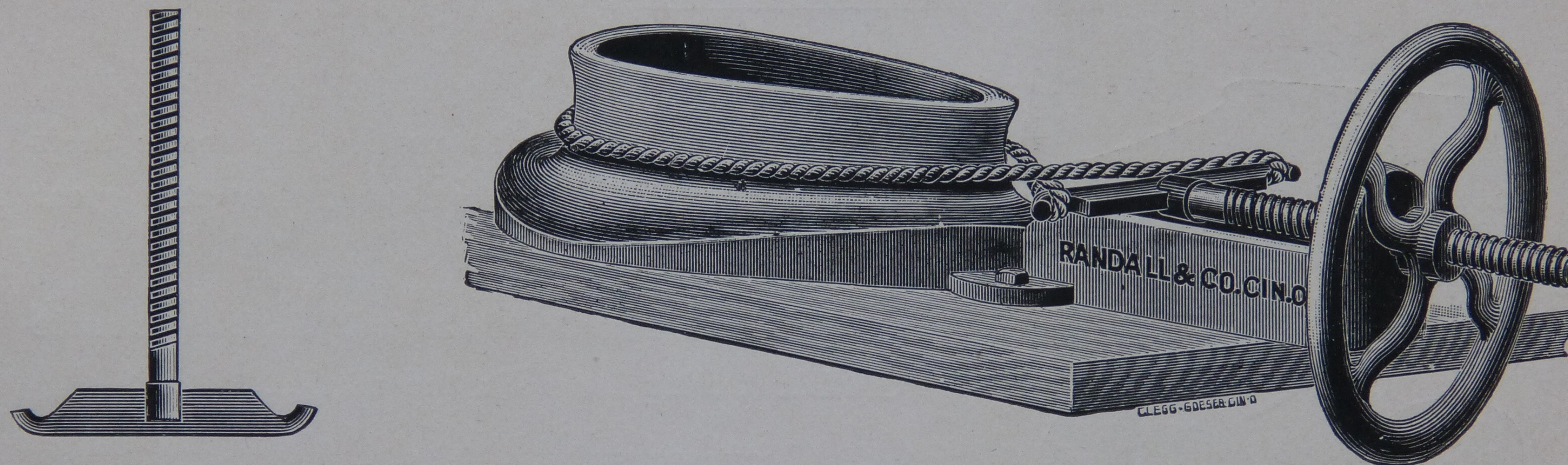


**REAR
END
VIEW**



IRON SCREW COLLAR BLOCK.

Special Anchor Screw. No Pin.



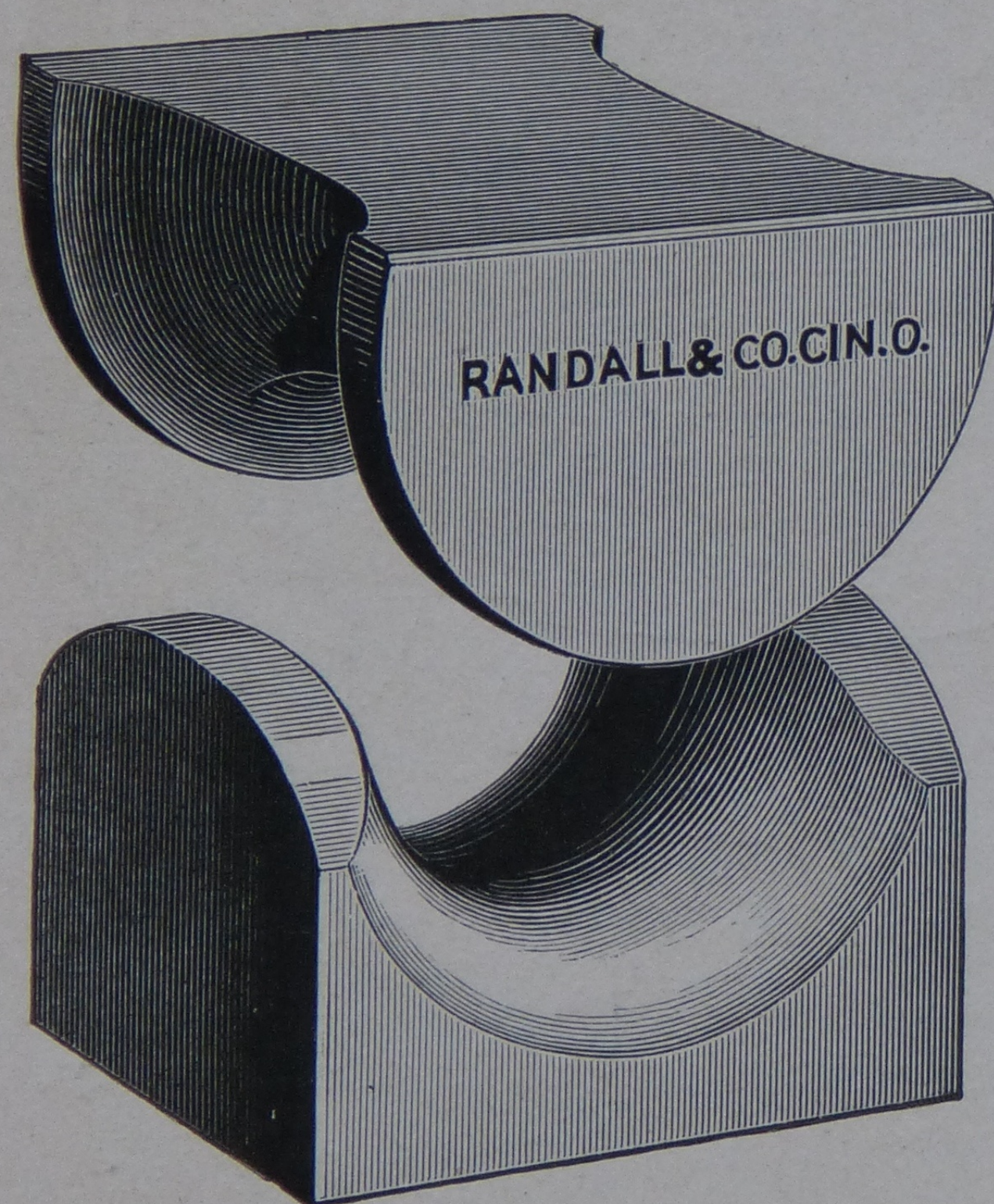
With either $\frac{1}{2}$, $\frac{5}{8}$, or $\frac{3}{4}$ inch wire rope. **\$15.00**

This Block, made of iron, always retains its shape. The head of the Block is covered with a preparation that renders it free from danger of staining the collar. They are bolted to a bench or table, and when a number of them are placed side by side, the collars can be blocked upon them rapidly and most satisfactorily. Nicely curved throat, proper draft. $1\frac{1}{4}$ screw, square threads. Large, heavy wheel.

— SIZES. —

No. 1— $7\frac{1}{2}$ x $21\frac{1}{2}$	will block collars	16 to 21 inches.
No. 2—8 x 23	“ “ “	18 to 23 “
No. 3— $8\frac{1}{2}$ x 25	“ “ “	21 to 25 “

COLLAR PAD MOULDS.



With these moulds parties can make their own Collar Pads from scrap leather at a great saving.

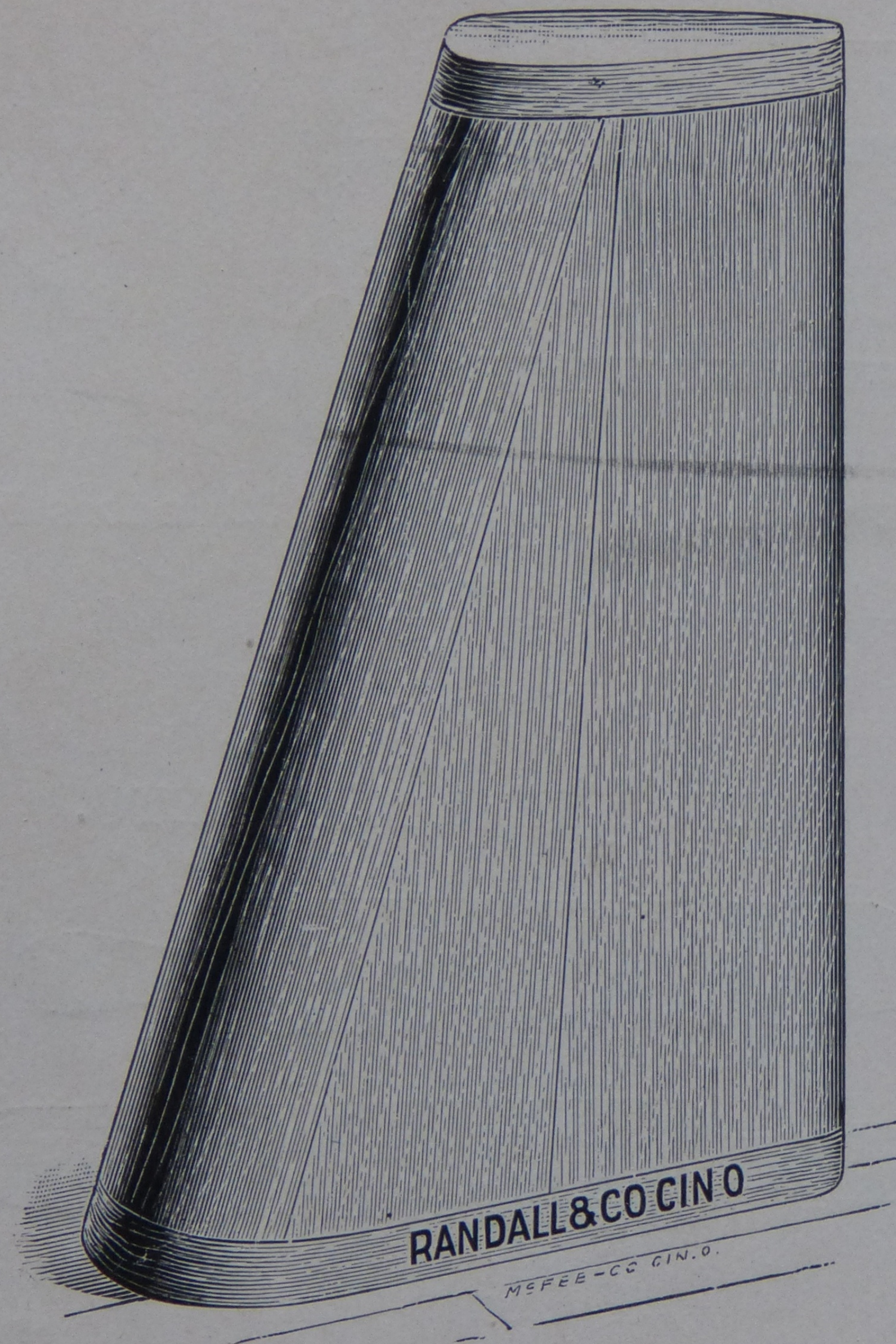
They are made to shape Pads like the sole leather Collar Pads on the market.

They are smoothly finished and produce a nice, smooth Pad.

We make to order Moulds for any style and size Pad.

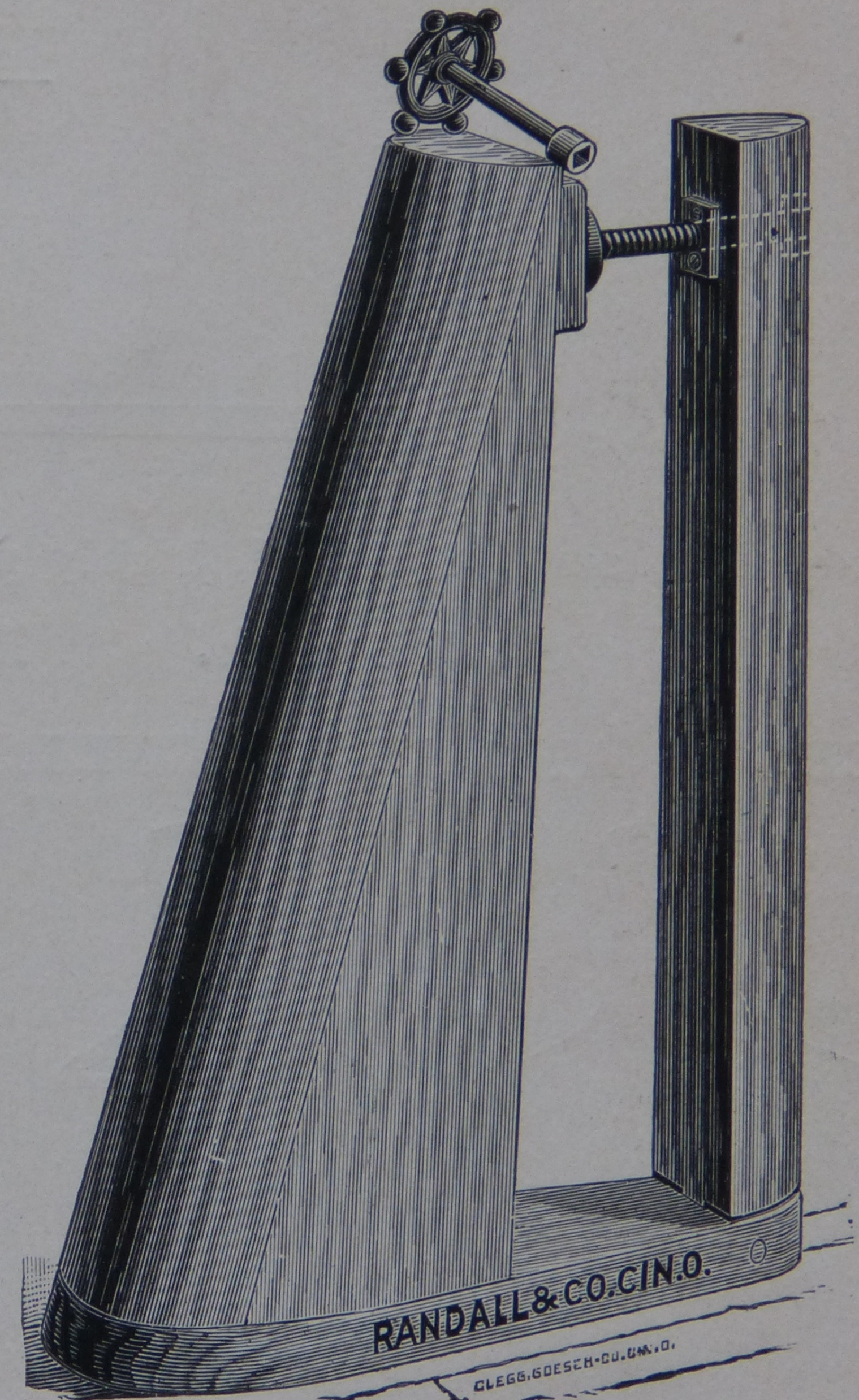
Sizes Nos. 0, 1, 2, 3, 4.....\$5.00 each.

Solid Upright Collar Block.



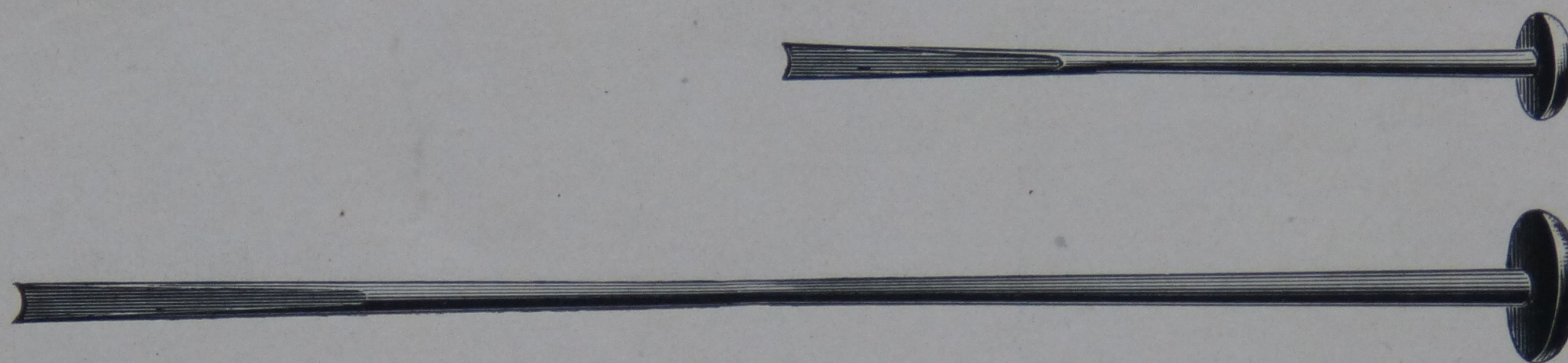
Price, \$15.00

Upright Screw Collar Block.



Price, \$15.00

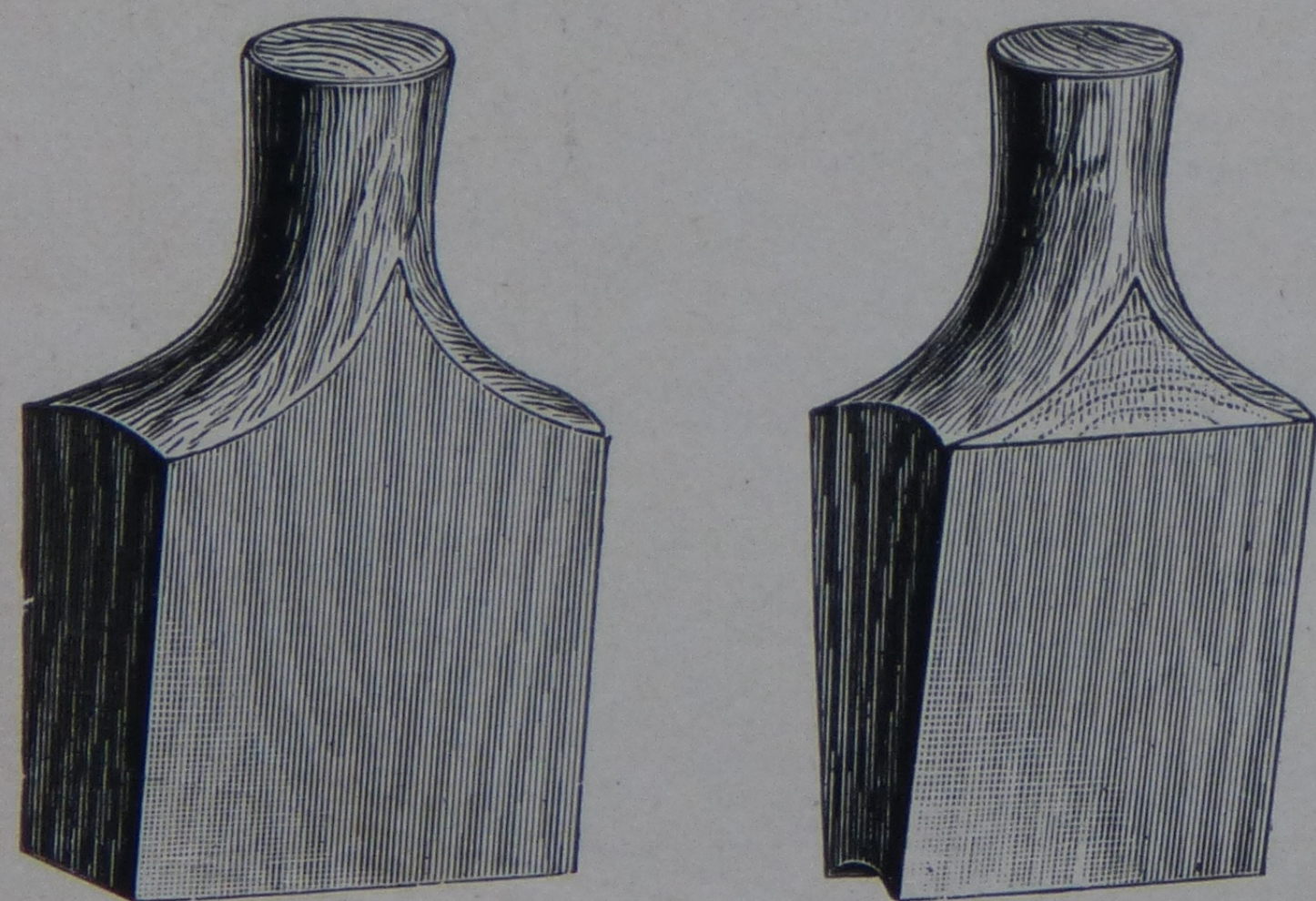
STEEL COLLAR STUFFING RODS.



Best quality, smooth ground, highly polished. $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ inch tips. 50, 51, 52 inches long.

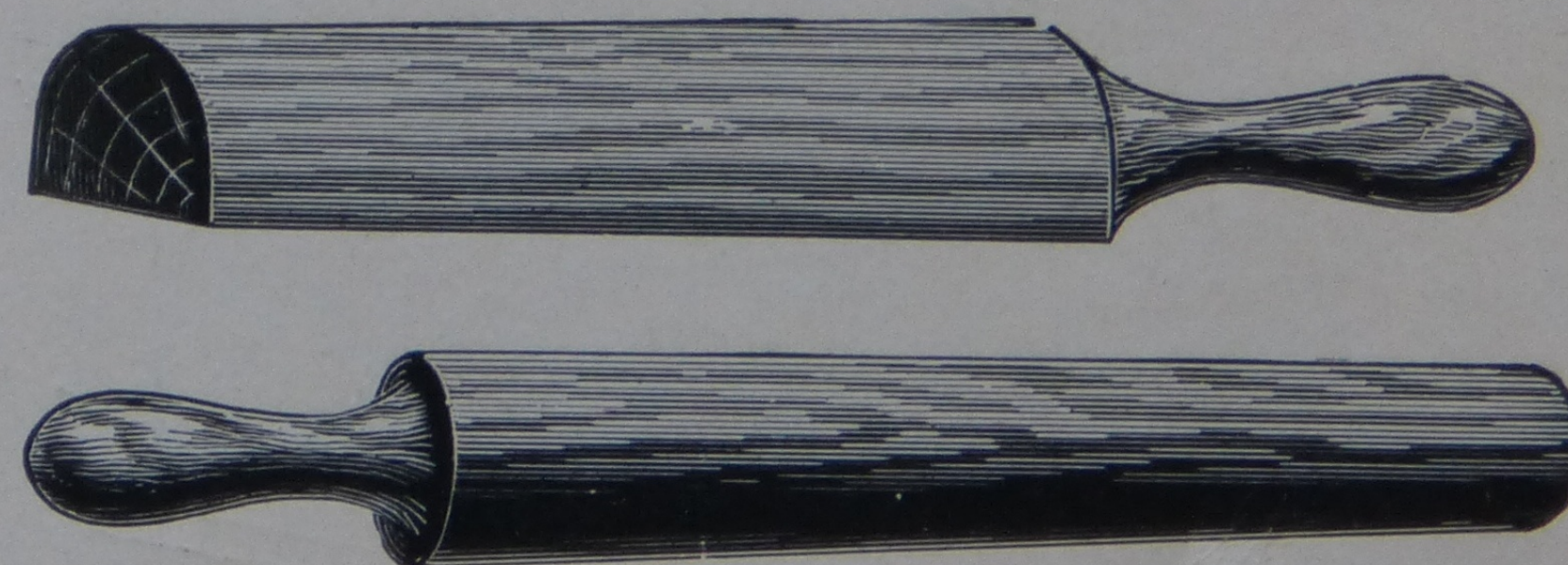
\$4.50 each. ANY SIZE MADE TO ORDER.

WEDGES AND FLATTENERS.



25 Cents each.

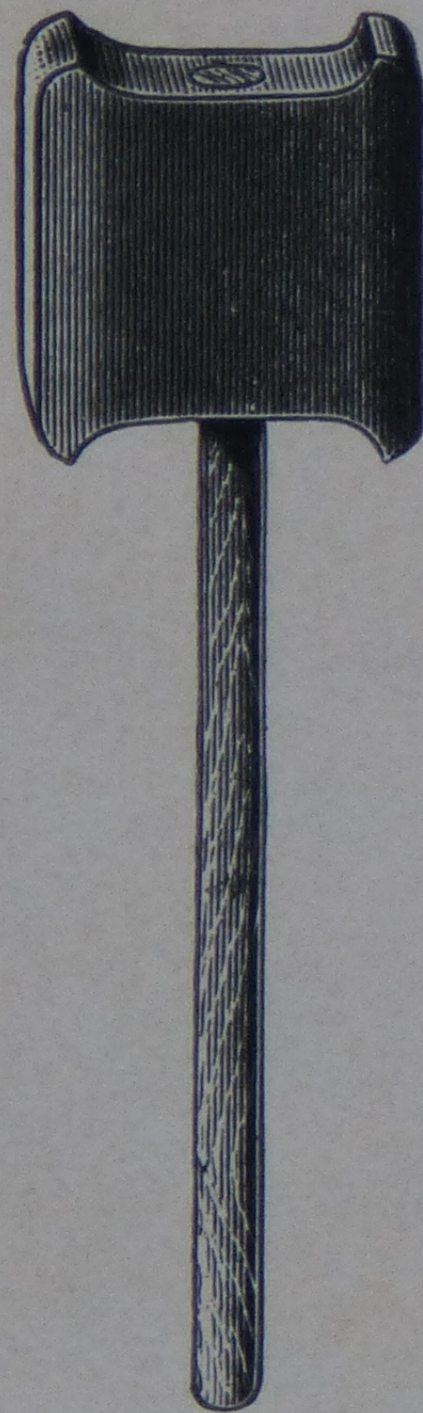
BREAKING MALLET.



75 Cents each.

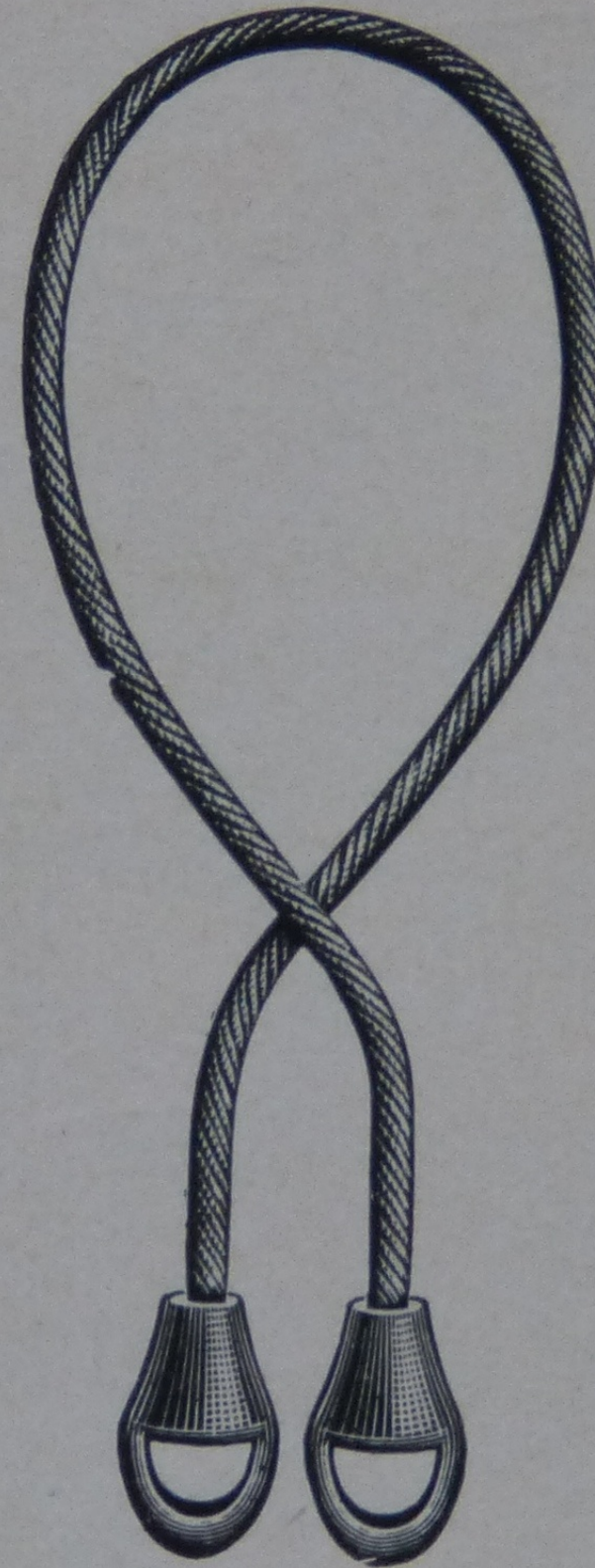
Steel Wire Rope.

Iron Collar Mallet.



A practical, durable mallet.
The best.

\$2.00



$\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ inch by 7 feet, with Loop Sockets.

$\frac{1}{2}$ and $\frac{5}{8}$ x 7 feet..... **\$1.35**

$\frac{3}{4}$ x 7 feet **1.60**

$\frac{7}{8}$ x 7 feet **2.00**

Sockets per pair, 25 cents.

Any Length to Order.

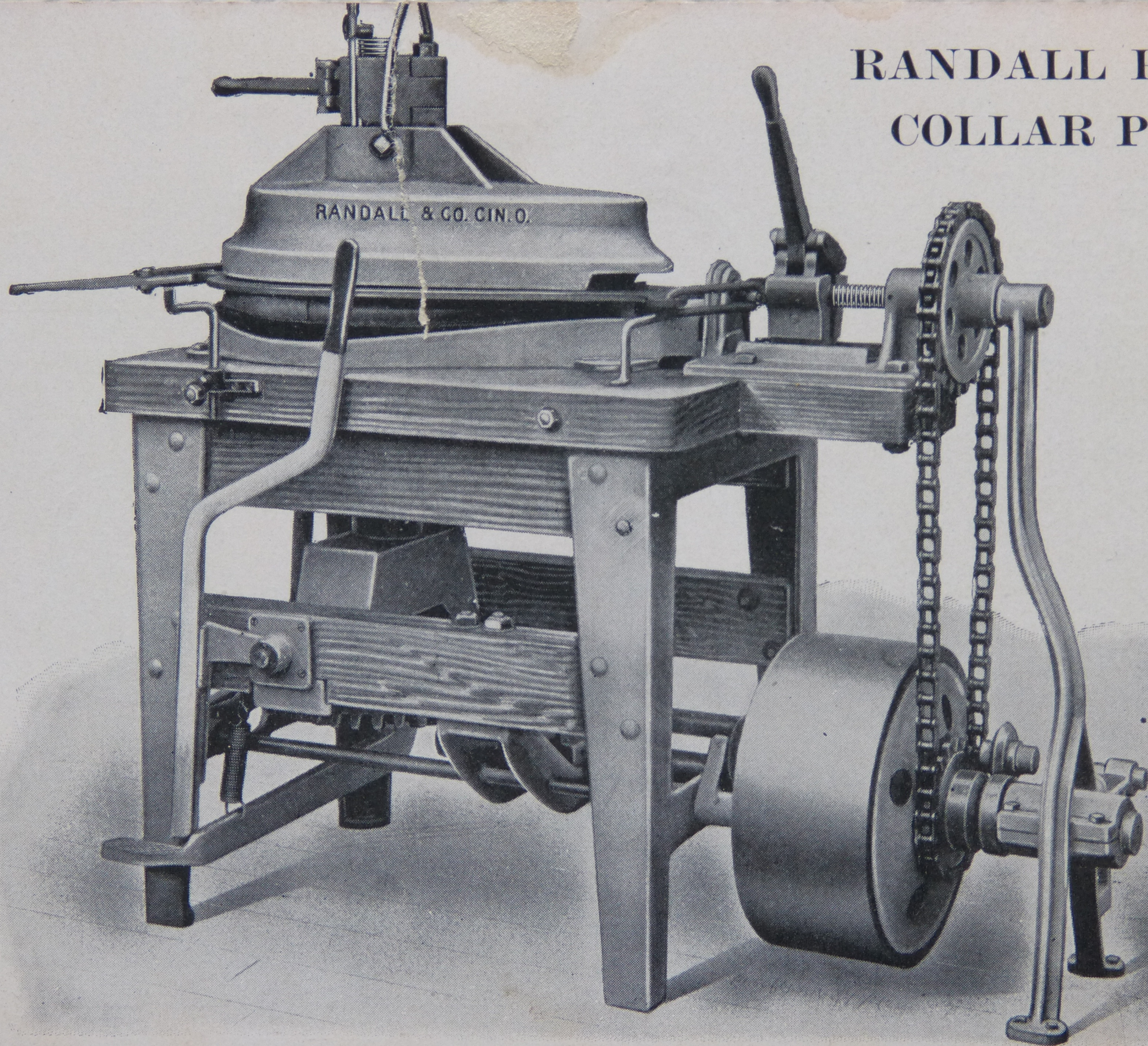
Collar Maul.



Lignum Vitae.

\$2.50

RANDALL POWER COLLAR PRESS.



RANDALL POWER COLLAR PRESS.

CUT on page 114 shows in detail the most *powerful, simple, and thoroughly practical* Power Collar Press or Block yet made.

The machine is driven by one belt. A friction, tightened by either a hand lever or treadle, drives the yoke screw.

The shaft, by which the cap is forced down onto the yoke, is driven by pressure on a treadle tightening a friction on the opposite side of the pulley.

The lock nut closed by the lever draws the yokes around the Collar under the rim, and any degree of pressure desired may be applied. They make a fine hame hold.

The yokes are opened and closed by a lever at the throat.

The nut resting on the cap is closed after the cap is lowered onto the yoke, and when opened by throwing the lever, the cap is raised. The cap is easily raised and lowered by counterbalancing weights. The yoke screw and the cap screw may draw the yoke around the Collar or force the cap onto the yokes separately or simultaneously.

This Block is strictly first quality as to material and workmanship. Is heavy and thoroughly reliable. The bearings are long and large diameter. It takes but little power and is easily operated. Floor space, 54 x 24 inches. Has a capacity of 35 dozen Collars in 10 hours' run.

It is made in 3 sizes—Size No. 1, small head; Size No. 2, medium head; Size No. 3, large head. Size No. 2 is usually sold.

Price, - \$350.00

**MODERN AND
IMPROVED**

**RANDALL'S
PATENT**

Horse-Collar

Stuffing

**Prices and Terms on Single Machines or
Set quoted on application.**

Machinery,

**Only Practical and Successful Flock and Short Straw
Machine made. Produces Collars Highest Quality and
genuine "Wool Faced."**

**REGULAR SET PRODUCES
30 Dozen and upwards per Day.**

See Pages 117 to 125

For Cuts and Descriptions.

IN offering our **Collar Stuffing Machinery** to the trade we take pleasure in calling attention to the various Machines comprising the set, as we have been able to develop machines which in point of **simplicity, durability** and **rapidity of operation** excel any similar machines yet made.

The machines are constructed in the best possible manner, of steel, brass, and iron, and owing to their superior construction they are driven at a speed which will produce 25 per cent. more Collars than can be stuffed on Wood Frame Machines driven at a relatively slower speed.

A complete set of Horse Collar Stuffing Machinery consists of one Rim Stuffer, one Rim Bender, one Short Straw Machine, one Hammer, one Backing-Off Machine, one Long Straw Cutting Box, one Hetschel for straightening long straw (when necessary), one Long Straw Cutting Knife, one Short Straw Sifter.

The principle of stuffing in the Long Straw Machines is exactly like hand stuffing, as the wad of straw is taken at the end of the rod and forced into a Collar the same as when a hand stuffing-rod is used.

The Short Straw and Flock Machine is far superior to any yet made, as with our forced feed wool flock can be stuffed as well as short straw, without clogging the machine. We do not hesitate to say that we have the best Short Straw Machine yet put on the market. This machine is the most important one in the set.

Collars stuffed on these various machines are equal to the best hand stuffed, and are stuffed at from one-fifth to one-third the price that the same Collars can be stuffed by hand.

These machines stuff all grades of Collars, from a common Duck to a heavy Scotch Team or the finest Patent Leather without removing any parts.

With a set of machines one man can stuff from six to seven dozen Collars in a first-class manner in ten hours. With a crew of three men, from fifteen to thirty-five dozen Collars can be stuffed in ten hours at a cost of from 25 to 65 cents per dozen, the cost being based on the amount paid per day for stuffers.

Because of the simplicity and superior construction of these machines there is virtually no breakage of fingers or rods, and the repairs in connection with running a set of these machines would be a trifle in the course of a year. A complete set of these machines takes about two horse-power. Any information regarding the machines as to space, speed, power, etc., will be cheerfully given.

We have the simplest, best constructed, most durable, and easily operated Stuffing Machines, and guarantee the greatest quantity and the highest quality of Collars that can be produced on any Horse Collar Stuffing Machines yet made.

RIM STUFFING MACHINE.

OUR RIM STUFFING MACHINE, as shown in the cut on the opposite page, is constructed on the long stroke principle, and will stuff the rim of a collar, from end to end, with a rod, as shown in the small cut, which is exactly the principle of a hand stuffing rod.

The machine is built in the best manner possible. The pulleys are large diameter and broad face, the shaft bearings are broad, the slide bearings are also renewable and easily adjusted to take up all lost motion caused by wear. The crank bearings are also renewable and adjustable, also the feed shaft and rod guides. These being the wearing parts of the machine, this feature makes the machines very durable and lasting.

The feed of the machine is such that it can be readily changed by two adjustable set-screws, so that the machine will put in the collar any number of straws from three to sixty to a wad, according to the set of the feed. The feed is driven by a sprocket chain, and places the wad in front of the stuffing rod at the right time after it has begun its forward stroke.

The machine is supplied with a cut-off, which prevents the straw being forced into the Rim while the machine is in motion, when so desired. The feed is entirely exposed to view and accessible, and any quantity of straw, also the heads, can be used in stuffing Rims. The Rim is held between adjustable jaws, clamped to the table. As the Rim is stuffed the table is pushed away from the feed opening.

The machine may be set so that any length of Rim can be stuffed, and when the last wad is stuffed into the Rim the machine stops automatically. The Rims are then bent in shape on the Rim Bender, shown by the cut (page 123). This makes a firm, smooth Rim, and beyond a doubt the best Rim that can be made.

By the tension weights, which can be varied to suit the size and weight of the Rim, the Rim can be stuffed any hardness desired. By changing the feed, to reduce or increase the size of the wad desired, buggy Rims, as small as three inches up to the largest six-inch team Rims can be stuffed in from one and one-fourth to two minutes, the smaller rims consuming more time because of the reduced size of the wad.

This machine, being built of steel, brass and iron, is very rigid, can be driven from 100 to 120 strokes per minute, and will stuff Rims in the best possible manner in from one and one-fourth to two minutes.

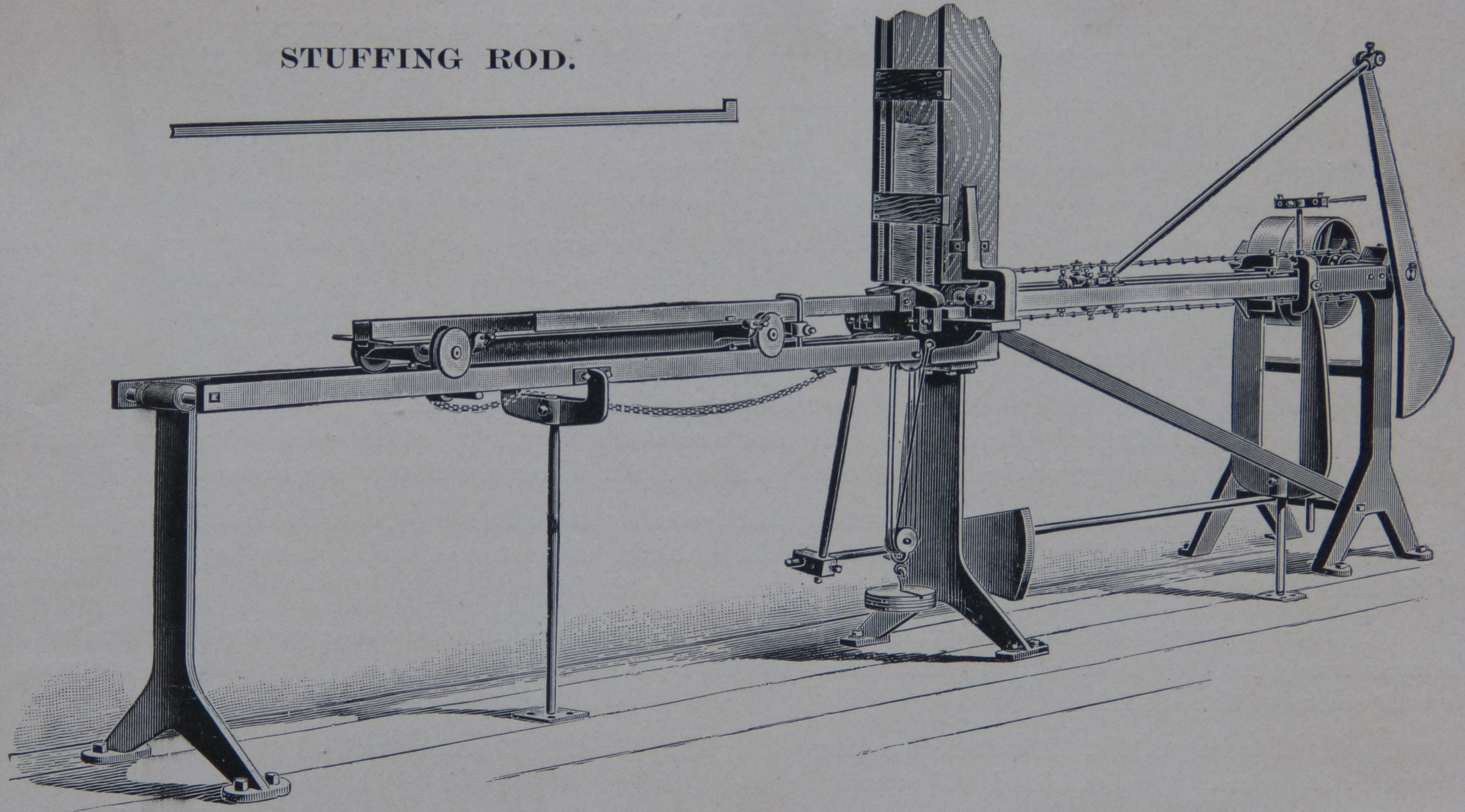
Because of the simplicity of the rod there is no breakage of rods.

These machines may be fed from the floor above, or by removable feed boxes, when it is necessary to feed the machine from the same floor on which it is operated. The space occupied by this machine is 26 feet in length by 38 inches in width. As the machine can be set against the wall, the length is not objectionable.

Tight and loose pulleys, 20 inches in diameter. Speed, 120 revolutions per minute. Weight, boxed, 2,300 pounds.

RIM STUFFER.

STUFFING ROD.



Capacity, 35 Dozen in 10 Hours.

SHORT STRAW AND FLOCK MACHINE.

THE accompanying cut shows the best Short Straw Machine yet put on the market. This is the only machine made that will stuff collars with a large percentage of flock mixed with straw, or with pure flock only.

The driving parts are supported on an iron pedestal. The straw is forced into the tube opening by the feeder driven by the gear wheels and the balance wheel. The Rod and the Tube are sufficiently long, and of proper size to admit of stuffing the smallest Buggy or the largest Team Collar without change.

The slide bearings are made so that they can be adjusted, taking up all wear and lost motion in the machine.

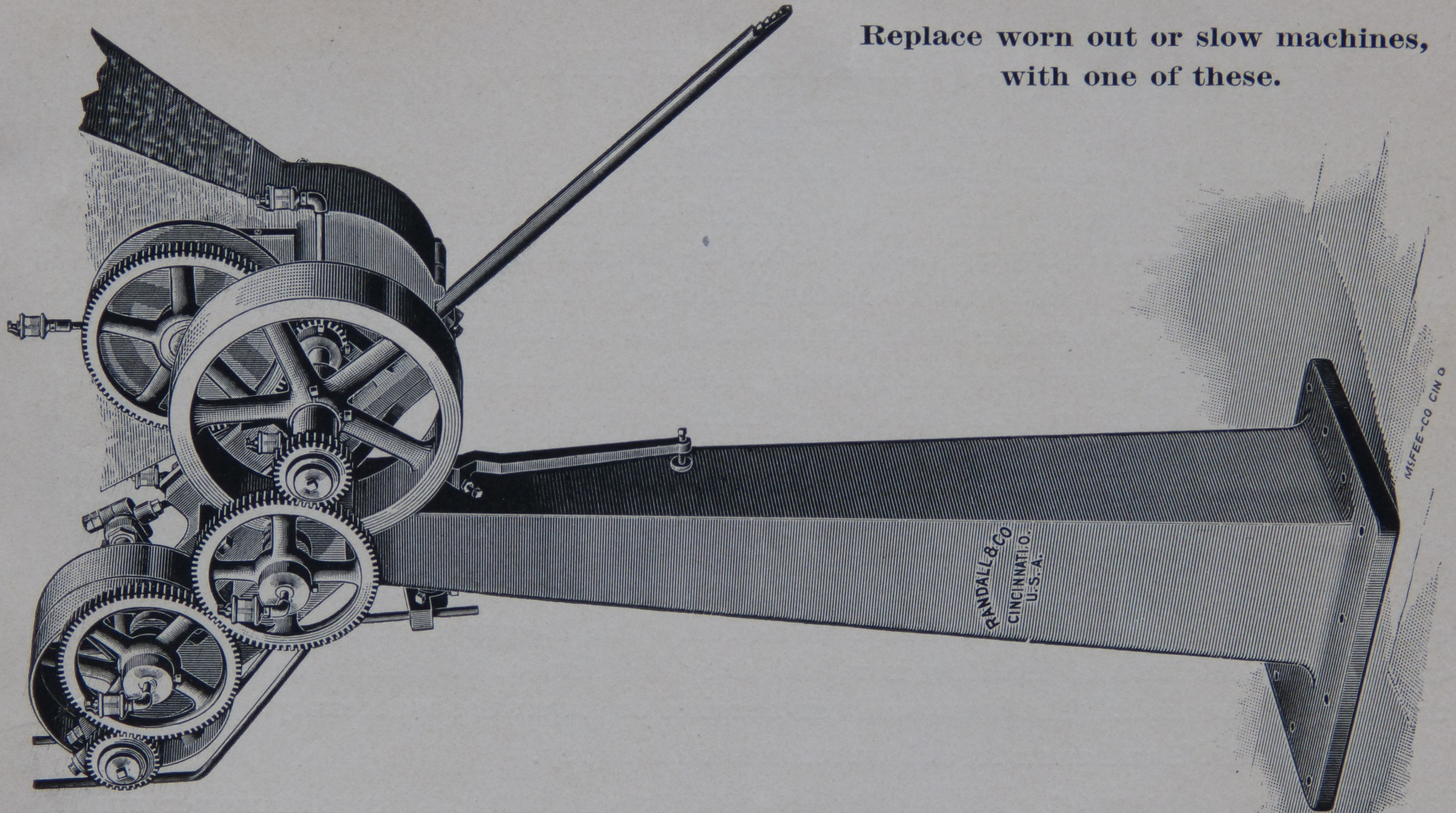
The capacity of the machine is from 40 dozen Collars and over per day, the quantity being dependent on the size and quality of the Collar. The cut shows the machine with a Hopper of sufficient size to stuff two dozen or more Collars with one filling; or the machine can be fed by a chute from the floor above, if desired.

This machine is far superior to any machine that feeds the straw into the Collar by an auger, as the straw can not be stuffed or packed by an auger into the Collar with the hardness necessary to use a large percentage of short straw, which is desirable, and a simple stroke machine is very slow.

It is not necessary to sift the straw for this machine. The straw can also be cut longer, as the machine will operate nicely in filling in straw that is cut varied lengths from $\frac{3}{8}$ to 2 inches. We can not speak in too praiseworthy terms of this machine.

Tight and loose pulleys, 12 inches diameter; 3 inch face. Speed, 450 revolutions per minute. Floor space, 3 feet by 18 inches. Weight, boxed, 900 pounds.

Replace worn out or slow machines,
with one of these.



SHORT STRAW AND FLOCK STUFFER.

PATENTED

HAMMER.

THIS MACHINE is a very important one in the set.

After the Collars are stuffed with short straw the body can be flattened and prepared for backing off very quickly, and as they leave the Hammer to be backed off, are in the best condition for producing a first-class job on the Backing-Off Machine. It is also valuable in shaping or finishing the Collar after leaving the Backing-Off Machine as it goes to the Collar Block.

The cut of our Hammer on the opposite page shows a Hammer recently designed, which after severe tests has proven itself thoroughly reliable.

The construction is the very best.

The Hammer head and anvil are of bronze metal, the Hammer arm of tool steel, crank shaft of cast steel, the bearings are heavy, and the machine will do hard work and last.

Pressure on the treadle causes the friction pulley to revolve slow or fast at the will of the operator. The driving pulley is always in motion. The blow is given by the pressure on the treadle. The hardness of the blow is regulated by the amount of pressure on the treadle and the height of the anvil. The brass anvil can be raised or lowered as is necessary.

It is the best Hammer made, and we recommend it highly.

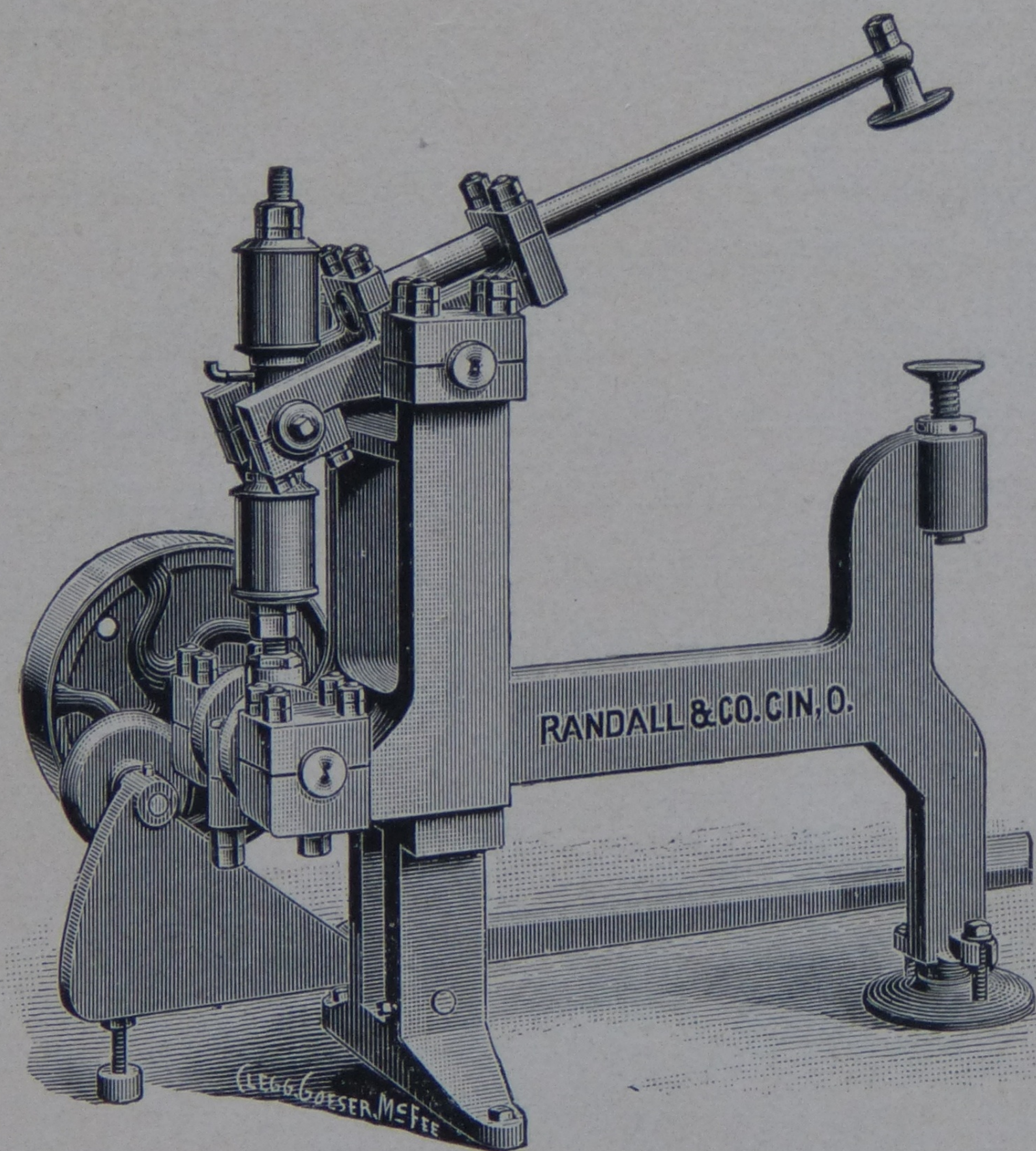
Floor space, 4 feet by 1½ feet.

Diameter of Pulley Flywheel, 17 in.; face 2¼ in.

Speed, 200 to 240 revolutions per minute.

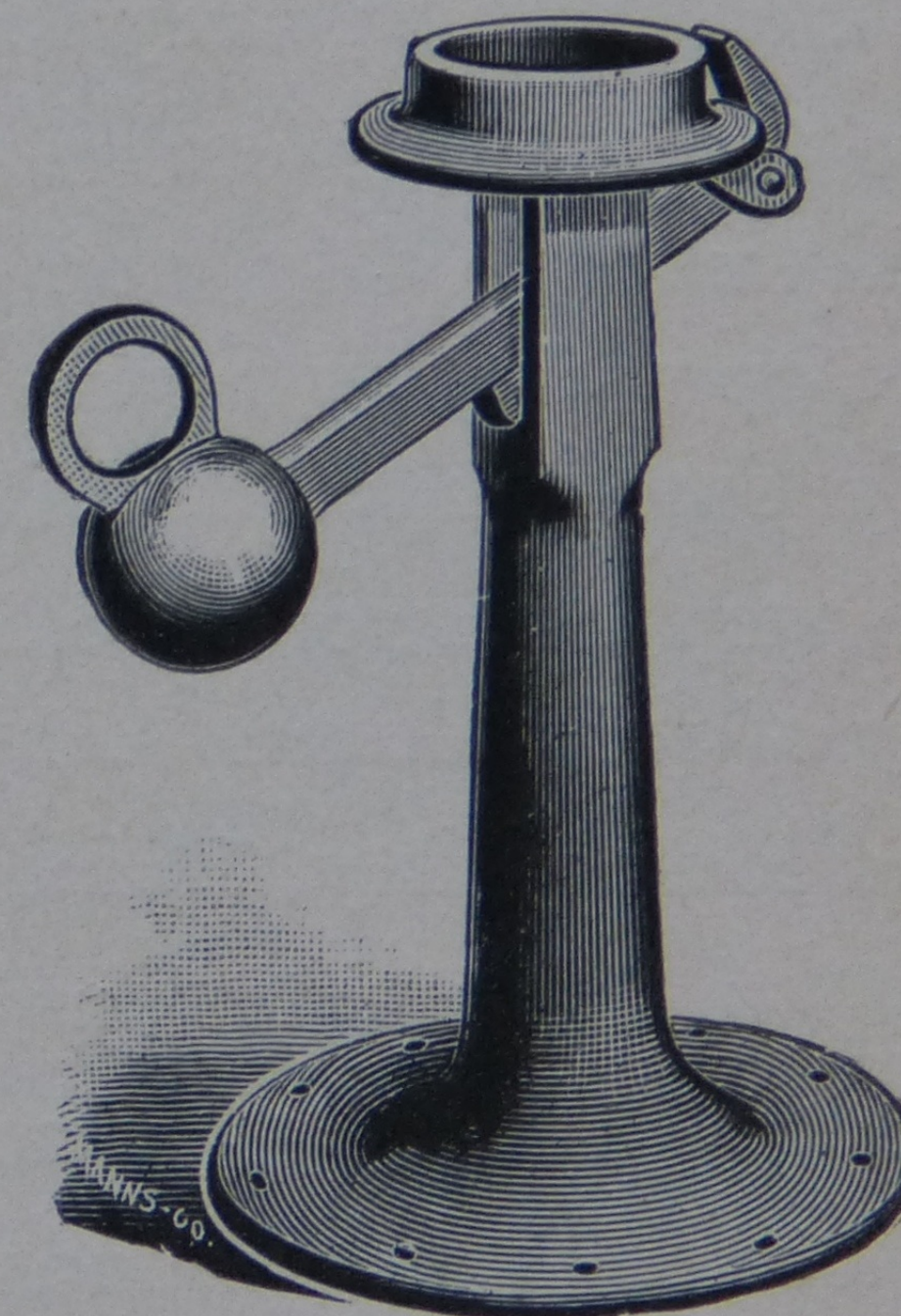
Weight, boxed, 700 pounds.

HAMMER.



RIM BENDER

For Bending Rims Stuffed by
Rim Stuffers.



Page 119.

BACKING-OFF MACHINE.

THIS MACHINE is exactly like the Rim Stuffing Machine in principle, except that it has a shorter stroke, and the table and table tracks are omitted.

After the Collars are stuffed with the quantity of short straw desired, and have been flattened out by the Hammer, they may be backed off on this machine as hard as desired.

With the fingers between which the Stuffing Rod works, the throat and body of the Collar can be worked out smoothly, and produce a first-class job. Although the machine is constantly in motion, the operator, by means of the treadle, can start or stop the feeding of the straw at his pleasure. The same fingers and rod are used in backing off all sizes of Collars.

This is a very superior machine, and can be driven at a high speed for such a machine, and has a capacity of forty dozen Collars per day.

Tight and loose pulley, 16 inches diameter.

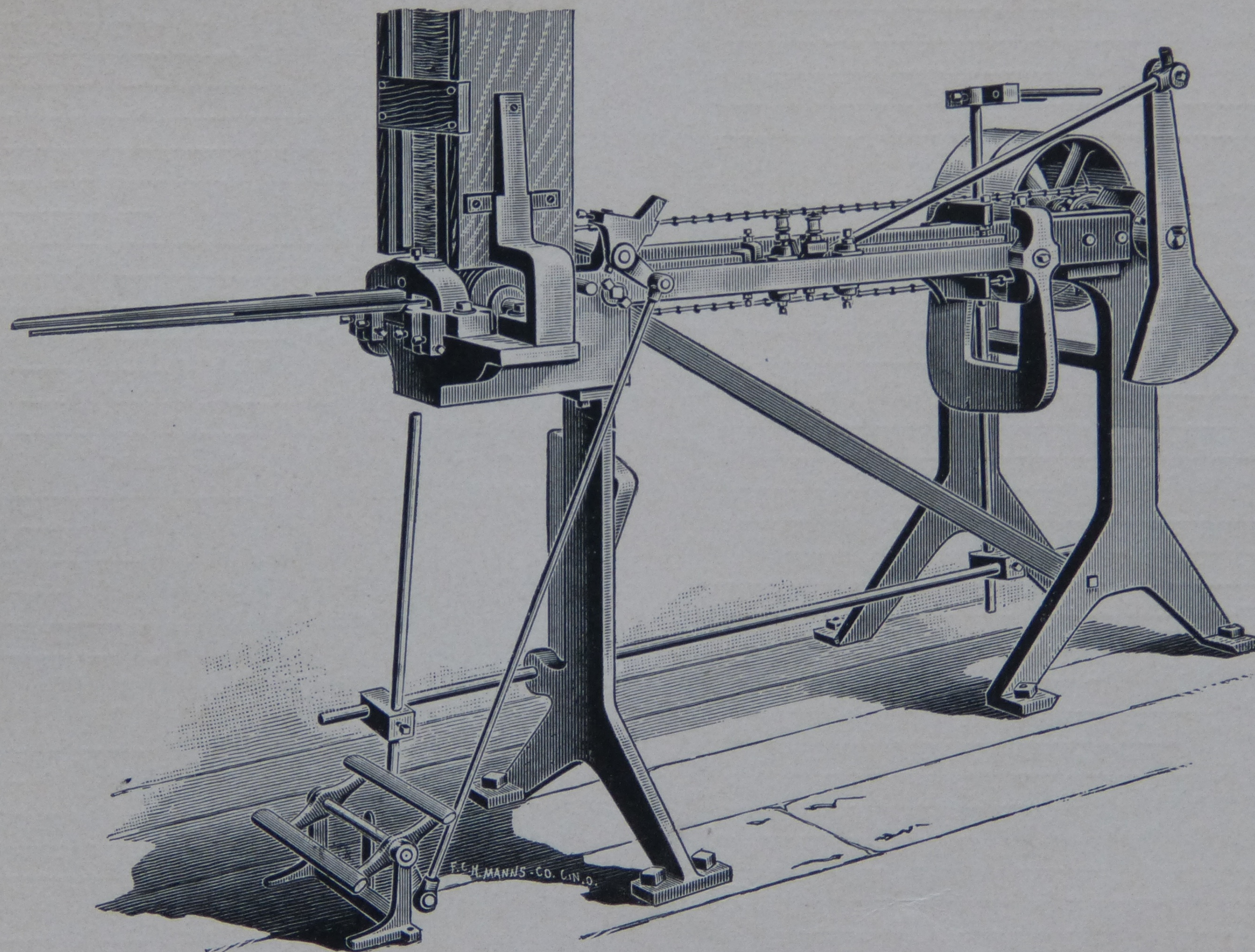
Speed, 180 to 225 revolutions per minute.

Floor space, 5½ feet by 38 inches.

Weight, boxed, 1,700 pounds.

Prices and Terms Quoted on Application.

LONG STRAW BACKING-OFF MACHINE.



Capacity, 40 dozen in 10 hours.

INDEX.

A

Acme Punching Machine.....	98, 99, 101
*Adjustable Wave Creasing Roll.....	22, 23
* " Folding Rolls.....	16
* " Jaw Stitching Horse.....	89
* " Jaw.....	87
*Anvils.....	33

B

Backs for Loop Dies.....	63
Beam Dieing-Out Machine (25 inch).....	106
" " " " (4 and 5 feet).....	107
*Beaters, Hair.....	92
*Bench Anvils.....	33
* " Skiving and Splitting Machine.....	29
* " Splitters.....	36, 37, 38, 39, 40, 41
Beveling Machine	39
Blind Moulds	68, 69
Blocks for Dieing-Out Machine.....	71
Block Plane.....	71
Blocks, Collar.....	109, 111
" Cutting.....	71
Bottom Plates, Brass.....	63
*Box Loop Boxes.....	50, 51, 52
" " Stapling Machine... ..	104, 105
*Brass Bottom Plates.....	63
" Creasing Moulds.....	72 to 83
Breeching Stay Box.....	53
*Breaking Rolls for Round Lines	26
" Machine for Round Lines	18
Brushes.....	42
Brush Shaft.....	42
Buffer and Sander.....	42
*Burnishing Outfit for Traces and Straps.....	27

C

*Chase Splitters	36
------------------------	----

*Cheek Loop Box.....	50
Cleaning Machine and Buffer.....	42
Crank Splitting Machine.....	38
Collar Block, Iron Screw.....	109
" " Upright.....	111
" Crimper Vise.....	86
" Heading Table.....	108
" Mallets.....	113
" Pad Beveling Machine.....	39
" " Moulds.....	110
" Press (Power).....	114, 115
" Stuffing Machinery.....	116 to 125
" " Rods	112
" Wedges and Flatteners	112
Combined Riveter.....	103
*Combination Loop Box.....	52
" Side Plate and Loop Die Outfit	64, 65
*Creasing Machines No. 1.....	7
* " " Nos. 2, 2½, 3, 3½.....	8
* " " Nos. 4, 4½, 5.....	10
" and Slicking Machine, No. 6.....	11
* " Machines Nos. 7, 8, 9.....	12, 13
* " " Nos. 10, 10½, 11.....	9
" Machine for Crown Pieces and Turnbacks.....	19
" " " Slicking, Creasing and Finishing Round Edge, Power.....	15
" Rings, Fancy Rope Wave, etc.....	23, 25
* " Rolls.....	6, 13, 22
" Moulds.....	72 to 83
" Side Plates for Loops	66
Crimping Vise.....	86
Crown Piece Slitter and Punch.....	101
" " and Turnback Creasing Machine.....	19
*Crupper Dock Former.....	32
" " Stuffer.....	91

INDEX-Continued.

Cutting Blocks.....	71
“ Dies.....	70
“ Machines for Dies.....	49, 106
Cutter (Hand) for Strings and Thongs.....	97
“ (Power and Hand) Straps.....	96

D

Dies, Cutting.....	70
* “ Loop.....	54 to 65
“ Steel Backs.....	63
Dieing-Out Machine.....	49, 106, 107
*Display Racks.....	84, 85
Dock Stuffing Machine.....	91
* “ Crupper Formers.....	32

E

Embossing Machine.....	24
“ Rings.....	24
Emery Grinder.....	94

F

Finishing Machine for Round Edge Straps.....	15
“ “ “ Traces.....	20
* “ Rolls, Traces.....	21
Flatteners, Collar.....	112
Folding Machine (Roll).....	17
“ Rolls.....	16
Folder, Crupper.....	90
*Former, Double Crupper and Rapid Crupper.....	32
Foot Power Punching Machine.....	98, 99, 100

G

Gig Saddle Loop Mould.....	61
Grinder, (Emery).....	94
Grindstone.....	95

H

*Hair Beater, Hand and Power.....	92
*Hame Tug Loop Box.....	51
Hand and Power Splitting Machines.....	40, 41
*Harness Presses.....	44 to 49
Heading Table (Collars).....	108
*Horses, Stitching.....	87, 88, 89

I

*Improved Chase Splitters.....	36
*Iron Loop Sticks.....	67
Iron Screw Collar Blocks.....	109

J

*Jaws, Stitching Horse.....	87, 88, 89
-----------------------------	------------

K

*Knives, Splitting Machine.....	36
“ Trace-Trimmer.....	28
Krebs Splitter.....	37

L

*Lap Skiving Machine.....	29
Lash Cutter.....	97
*Loop Boxes, Cheek.....	50
* “ “ Hame Tug.....	51
* “ “ Shaft Tug.....	51
* “ “ Combination.....	52
* “ Dies.....	54 to 65
“ “ Outfit.....	64, 65
* “ Presses.....	44 to 49
* “ Sticks.....	67

M

Mallets, Breaking.....	112
“ Collar.....	113
“ Rawhide.....	35
Mauls, Collar.....	113
Moulds, Blind.....	68, 69
“ Brass Creasing.....	72 to 83
“ Collar Pad.....	110
“ Gig Saddle Loops.....	61
Moulding, Pressing, and Dieing-Out Machine.....	48, 49

O

Oval Line Rolls.....	26
----------------------	----

P

Pad Moulds, Collar.....	110
* “ Box, Team and Coach.....	43
Plane, Block.....	71
*Plates, Brass Bottom for Loops.....	63
* “ Side Crease “ “.....	66
Power Brushes.....	42
“ Collar Press.....	114, 115
“ Creasing Machines.....	14, 15
“ Press and Die Cutter.....	48, 49
“ Rolling Machine.....	93
“ Splitting Machines.....	40, 41

INDEX-Continued.

Press, Power Collar.....	114, 115
Presses, Power.....	48, 49
* " Screw.....	44 to 47
Pulley, Clutch and Shifting Attachment.....	5
Punch Gauge.....	102
Punching Machine, Acme.....	98, 99, 101
" " No. 4.....	100, 101
Punches, Single.....	101
" in Gangs.....	101

R

*Racks, Display.....	84, 85
*Rapid Crupper Former.....	32
" " Stuffer.....	91
" " Folder.....	90
Rawhide Mallets.....	35
*Rein Rounders.....	31
Riveter.....	103
Rods, Collar.....	112
*Rolls, Breaking.....	26
* " Creasing.....	6, 13, 22
" Oval Line.....	26
" Shaft Tug.....	21
" Trace Finishing.....	21
" Embossing (Rings).....	24
Roll Folding Machine.....	17
Rolling Machine, Power.....	93
Rope, Steel Wire.....	113
*Rounder, Rein.....	31
Round Edge Slicking and Finishing Machine, Single Straps.....	15
*Round Rein Attachment.....	87
" Line Breaking Machine.....	18
* " " " Roll.....	26
Round Punch Gauge.....	102

S

Sander and Buffer.....	42
*Screw Presses.....	44 to 47
*Shaft Tug Loop Boxes.....	51
Shaft Tug Roll.....	21
*Side Crease Plates.....	66
Side Plate and Loop Die Outfit.....	64, 65
*Skiving Machines.....	29
Slicking Machine, Power or Hand.....	11, 15

Slitter and Punch for Crown Pieces.....	101
* " Strap, Nos. 1 and 2.....	30
*Splitting Machines, Hand.....	36 to 41
" " Power and Hand.....	40, 41
*Splitter and Skiver, with Crank.....	38
Stapling Machine.....	104, 105
Stay Forming Box (Breeching).....	53
*Steel Loop Sticks.....	67
*Stitching Horses, Adjustable Jaw.....	88, 89
* " " Wood, Jaw.....	88, 89
*Sticks, Loop, Steel and Wood.....	67
Strap Cutter.....	96
* " Holder.....	33
* " Slitters, Nos. 1 and 2.....	30
* " and Trace Trimmer.....	28
* " " " Burnishing Outfit.....	27
*Straight and Wave-Layer Beveling Machine.....	39
String and Thong Cutter.....	97
Stripping Machine.....	106
Stuffing Machinery.....	116 to 125
" Rods.....	110

T

Table, Heading (Collars).....	108
Team Pad Box.....	43
Thong and Lash Cutter.....	97
*Trace Burnishing Outfit.....	27
" Finishing Machine.....	20
* " " and Bearer Rolls.....	21
* " Trimmer.....	28
*Trimmers, Strap and Trace.....	28

U

Upright Collar Block.....	111
---------------------------	-----

V

Vises.....	34
" Collar Crimper.....	86

W

*Wave Crease Rolls.....	22, 23
Wedges, Collar.....	112
Wire Rope.....	113
*Wood Loop Sticks.....	67

1858.—

ORIGINAL

RELIABLE.

PROGRESSIVE

— 1902.